IN THE CHANCERY COURT OF JACKSON COUNTY,

MISSISSIPPI

CAUSE NO. 94-1429

IN RE: MIKE MOORE, ATTORNEY GENERAL
EX REL, STATE OF MISSISSIPPI
TOBACCO LITIGATION

DEPOSITION OF:	HUGH W. LONG, MBA, Ph.D.
DATE:	Wednesday, April 30, 1997
TIME:	1:00 p.m.
LOCATION:	Phelps Dunbar 400 Poydras Street, 30th Floor New Orleans, Louisiana
TAKEN BY:	Counsel for the State of Mississippi

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HUGH W. LONG, MBA, Ph.D. - EX. BY MR. YOUNG

STIPULATION

It is stipulated by and among Counsel that this deposition is being taken in accordance with the Federal Rules of Civil Procedure; that all objections except as to Notice of this deposition are hereby waived; that all objections except as to form are reserved until the time of trial; and that the witness has waived the right to read and sign the deposition after review by counsel.

* * * * * * * * * * * * * * * * *

HUGH W. LONG, MBA, Ph.D.

Being first duly sworn, testified as follows:

MR. HELMS:

I want to make a quick statement. I understand that we have with us -- Is it Mr. Bienville?

MR. FONVIELLE:

Fonvielle.

MR. HELMS:

He's from Florida and not counsel of record. We object to him being here because it's not provided for under the case management order. I won't kick him out or anything. I want the objection noted.

This deposition was not noticed in the Florida case. We will not let him answer any Florida questions, anything you want to ask him, any Florida specific cases. Anything you want to ask him about his role that deals with the Mississippi case, you are free to ask him.

MR. YOUNG:

We have no intentions to ask him anything about the State of Florida. We have likewise done the same thing allowing folks to sit in for the defendants.

Is that it?

MR. HELMS:

That's it.

MR. YOUNG:

We have a preliminary statement. We are taking Mr. Long's deposition today subject to certain self-prescribed and certain guidelines imposed by the court in the granting of a motion in limine. The disclosure statement which has been premarked Exhibit #2 to the deposition contains areas that the State of Mississippi believes are covered by the court ruling in the motion in limine. We don't intend to go into those areas today.

However, if we inadvertently go into those areas, it is not to be construed as a waiver of our position with regard to our position. We have attached our position with regard to the paragraphs and what we intend to inquire of Dr. Long today. He reviewed this piece of correspondence and it is attached as Exhibit #3 to the record.

MR. HELMS:

When did he review it?

MR. YOUNG:

A few minutes ago when you were out of the room.

MR. HELMS:

Okay. I agree with your characterization that any limitations are prescribed by the plaintiff and not by us. I disagree that the limitations are prescribed by the court. You ask him whatever you want on his expert report. If you don't ask him questions, you do so at your peril, and Mr. Susman responded to that position in a letter about a week ago. That would represent our response.

EXAMINATION

BY MR. YOUNG:

Q. Dr. Long, I introduced myself to you actually about an hour ago. I am Lee Young on behalf of the State of Mississippi in the case filed by the State of Mississippi against the tobacco industry.

Have you ever sat for a deposition before?

A. Yes, sir.

Q. Are you familiar -- I'm sure your counsel told you a little bit about how a deposition works and has given you some guidance with regard to this deposition. You understand that you will have to give a verbal response to the court reporter. She take can't take down nods of the heads.

A. Yes, I do.

Q. Do you know that since there will be at least the two of us communicating in terms of questions and answers, it will be important to let me finish my question or for me to let you finish your answer. She can't take two people at the same time.

A. I understand.

Q. If at any time you don't understand any of the questions that I ask you, ask me to rephrase

it. I want to make sure we are on the same page when we respond to the questions. I'm sure counsel told you many of the same points. I thought I would go through them quickly before we got started.

Have you had an opportunity to -- I will hand you Exhibit #1 to the deposition.

Have you had an opportunity to review that Notice of Deposition?

A. I have seen this.

Q. Do you see in the notice where it calls for certain items to be produced?

A. Yes, sir.

Q. To the best your knowledge, have you produced those documents?

A. To the best of my knowledge, these documents were produced.

Q. Okay. May I see that, please?

A. Yes.

Q. So other than the additional documents that were provided just immediately prior to the deposition today by Mr. Streeter, we have all the documents on which you intend to rely concerning your opinions in this particular case?

A. All the documents that have been

provided to me or that I have generated have been shared, yes.

Q. The long and the short of it, I am trying to make sure there are no other documents that you would rely on in providing your testimony in this case that have not been provided to us.

MR. HELMS:

I object. That's not a question

BY MR. YOUNG:

Q. Are there any documents that you intend to rely on in providing your expert testimony that you have not provided to us?

MR. HELMS:

I object. Calls for speculation.

THE WITNESS:

I would expect I will receive additional documents -- for example, when the models being proposed as mechanisms for measuring damages are finalized and put forward, I would expect to perhaps see additional transcripts of depositions which have not yet been transcribed. I would expect to be -- have access to information that is presented during the plaintiff's case at trial. All those things would be things that I would expect to see in the future.

BY MR. YOUNG:

Q. You just made a statement that any additional models or versions of models prepared by the state. What do you mean by that?

A. I have been advised that there have been continuing revisions to some of the models. I'm not sure if that process is finished yet or not. Whenever that comes to rest, that I would expect to have more information about the models than I currently have.

Q. When you say the models, which specific model are you referring to or which specific models are you referring to?

A. Certainly would include potentially the use of the model in the Max report, the Miller model.

Q. When you say "Miller," you mean Vincent Miller?

A. Yes. Yes. And the neonatal study -- I'm drawing a blank on the name of the gentleman.

Q. Dr. Oster?

A. Yes.

Q. Let me ask you this. With regard to the models, so to speak, if that's what they are,

concerning Dr. Max, in formulating your opinions that you will talk about here today, what was the latest report that you reviewed by Dr. Max?

A. Latest report I have from Dr. Max was December 6, 1996.

Q. Well, you have not seen Dr. Max' report that was prepared in April?

A. I am not aware of the April version.

Q. That's not been provided to you?

A. That's correct.

Q. How about what's the latest version of Dr. Miller's report that you plan to offer opinions about today?

A. March 7, 1997.

Q. We will reserve our right in the event he finally receives Dr. Max' report which has been previously, the final of her report which has been previously provided to the defendants to conduct a limited follow-up deposition with Dr. Long in the event his opinions change once he's reviewed that report.

MR. HELMS:

We will have to cross that bridge when we come to it. The latest report came out this month, I think, so many months after it was

supposed to come out.

BY MR. YOUNG:

Q. What transcripts have you asked to see that you have not seen?

A. I have not specifically requested any particular transcripts at this point in time. I have been advised that there have been some depositions recently taken that have not yet been transcribed which counsel plans to provide me.

Q. Who would those be?

A. I believe Dr. Miller was one of the persons. I don't know that I have been given a list of the individuals.

Q. Anybody within Medicaid that you have requested be deposed?

A. I have not requested, no.

Q. That you requested a transcript of?

A. No. I made no request for transcripts.

Q. We jumped ahead.

Would you put your full name on the record, please?

A. Hugh W. Long.

Q. Your business address?

A. 832 Pine Street, New Orleans, Louisiana

70118.

Q. Dr. Long, I will get, if you can, please, to identify for me what's been marked as Exhibit #2 to the deposition.

A. This is two pages, Rule 26 expert statement, and attached to it a curriculum vitae for myself dated January 6, 1997.

Q. Okay.

A. Twenty-three pages.

Q. Okay. Today at the beginning of the deposition, among a couple of other documents was another curriculum vitae. It's my understanding that this is an updated version of your CV?

A. Yes.

Q. If we could mark that Exhibit #4, please.

Can you identify Exhibit #4 for me, please? Is that your updated CV?

A. That's the updated CV of April 12.

Q. Between Exhibit #2, the CV attached on Exhibit #2, and the CV that has been marked as Exhibit #4, what changes were made or what was updated on those?

A. In addition to some updates on addresses, the new CV includes my recent promotion

to full professor. It includes my recent appointment as the chairman of the Medicare Geographic Classification Review Board. It includes an additional report to Congress by the Prospective Assessment Commission on which I sit as a commissioner.

Those would be the significant changes.

Q. Any additional publications that were added?

A. No additional publications during that period.

Q. Have you prepared a final -- a report for this case?

A. I have not.

Q. Do you plan on preparing a report for this case?

A. I have not been asked to prepare a written report.

Q. So you have no plans the do that?

A. I have no plans to do that at this time.

Q. Can you tell me, please, what the Department of Health Systems Management at Tulane is?

A. It's one of six academic departments in the School of Public Health and Tropical Medicine which is one of the two academic schools at the Tulane Medical Center; the other being the School of Medicine. The Department of Health System Management is the department that offers degree programs in health administration. They offer MHA degree, Masters of Health Administration degree in two formats; traditional daytime in residence program, and an executive MHA format.

They offer a Master of Public Health degree with emphasis in management. They offer a Master of Medical Management degree for physicians, and a number of joint degree programs with other divisions of the university; a joint MD/Ph.D. degree with the medical school, JD MHA with the law school, and MBA and PhD with the Freeman School of Business.

Q. Your position at Tulane is within this department?

A. My primary appointment is in the School of Public Health in the Department of Health Systems Management.

Q. You said primary. Do you have a secondary?

A. I have joint appointments in the Freeman School of Business, in the Tulane Law School, and on the graduate faculty of the university.

Q. Could you tell me, please, what is health care economics? Can you define that for me?

A. Health care economics is basically a subdiscipline of economics that focuses on matters relating to the provision of health care and medical care services, the organization of the mechanisms for both providing those services and paying for them.

Q. Do you consider yourself an expert in the field of -- is it a field? Is health care economics a field?

A. Yes. Health care economics is a field. I bridge the fields between health care economics and health care finance. Economics being more the pure academic discipline; finance being the more disoriented managerially oriented prospective of the same phenomenon.

Q. Did you consider yourself an expert in the field of health care economics?

A. Yes.

Q. Do you hold a degree in statistics, as

a statistician?

A. No.

Q. Do you consider yourself an expert in the field of statistics?

A. No.

Q. Do you use statistics in your work as a health care economist?

A. Yes.

Q. How do you do that generally?

A. Generally, one uses various statistical tools for analyzing information of a quantitative nature. In economic research one uses various statistical techniques to estimate relationships, again, to analyze, and in some instances forecast, various economic quantities or relationships in the field. Very often in formal studies there will be professional statisticians working with economists.

Q. Let's backtrack for a second. You also operate, you have a business called Hugh W. Long & Associates. Is that correct?

A. I do.

Q. Where is that business located?

A. At the address that I gave the court reporter.

Q. Could you tell me that address on the record?

A. 832 Pine Street, New Orleans, Louisiana.

Q. Okay. When you gave that address, were you referring to Hugh W. Long & Associates, and not your address at the university?

A. That's correct.

Q. Those two are separate and apart?

A. Yes, they are.

Q. What is the business purpose, if you will, of Hugh W. Long & Associates?

A. Hugh W. Long & Associates engages in providing economic expert testimony in civil litigation primarily in matters that are related to the health care industry, and also as a second activity provides educational seminars in the area of health economics and finance primarily for associations.

Q. How long has -- I suppose you're the founder of Hugh W. Long & Associates?

A. That's correct.

Q. How long has that business, or is it a corporation, a business?

A. It's a sole proprietorship.

Q. How long has that sole proprietorship been in existence?

A. In terms of the activities and reporting as a sole proprietorship since about 1976 or '77. Using the name Hugh W. Long & Associates, probably 12 to 15 years.

Q. What was the preceding name?

A. Hugh W. Long, Ph.D.

Q. Are those the only two names that this particular entity has gone by?

A. Yes.

Q. You mentioned earlier that economists sometimes employ or use statisticians in their work?

A. Yes.

Q. Do you also do that?

A. I have not recently had occasion to employ anyone in the statistics area.

Q. Have you in the past?

A. The last time that I did that was probably more than ten years ago in conjunction with doing an analysis of accessory turns on the common stock of a company in a manner that was unrelated to health care.

Q. Who was that statistician?

A. That person was named David Harvey doing a statistical analysis.

Q. Do you know who he was with at the time?

A. His prior employer?

Q. Yes.

A. Tulane University.

Q. Do you know where he is today?

A. I believe he's still with the university, but I'm not absolutely positive about that.

Q. Have you applied or are you utilizing in any way a statistician with regard to your expert analysis and opinions in this case?

A. Not a professional statistician that's under my control. The defendants -- I understand the defendants have retained a number of professionals, statisticians, and I expect to be provided with some of their results when those become available.

Q. Do you intend to rely on those in formulating your expert opinion in this case?

A. I would expect that they would corroborate or refute impressions that I have at this point.

Q. Okay. Who are those to your knowledge, these statisticians that the defendants have hired?

A. I do not know the names or identifications of any of these persons.

Q. Well, how do you know of their work?

A. I don't know who they are at this point.

Q. Do you know if they are qualified?

A. I'm sure I will find out who they are when there's something to be provided to me.

Q. Is that important to you whether or not the statistician is qualified?

A. Certainly.

Q. When did they tell you they would have some type of statistical analysis to you?

A. I was advised that I would see results from that once the statisticians were provided with the final models some subsequent period of time to allow them to analyze them.

Q. You don't know who the statisticians that we are referring to are?

A. I haven't asked and they haven't told me.

Q. Did you tell them what kind of statistical analysis you wanted?

A. No, sir.

Q. You have not requested a statistical analysis? What is your understanding of what they are doing?

A. I presume they are going through the code of the computer programs that have been provided, looking at the formulas, looking at the tests of significance, the usual things that I would anticipate a statistician would do in trying to verify the work of some other statistician.

Q. What are those?

A. What are those what?

Q. Tests, tests that you're referring to.

A. The ones I just listed.

Q. Tests of significance?

A. Tests of significance, understanding the formulas that have been used, whether or not they are consistent with what the builders of the model purport that the model does.

Q. Well, what are tests of significance? Can you tell me? Tell me what you would be interested in seeing. Please keep it as layman's terms as possible.

A. Since I have seen none of the specifications of the model other than a list of

variables and a very broad description of -- for example, we have estimated coefficients for two equations and one of them is a logit and one is a probit period. That is all I have seen. I would presume that after the coding for the equations and the translations of the raw data into usable form in the equations has been verified, that among other things the statisticians would first of all see if the construct of the mathematical equations to estimate coefficients is correctly done in accordance with the perimeters of those kind of models.

Q. How do you do that?

A. There are -- I mean, that is the substance of statistical analysis is that there are formal equations and parameters for different kinds of model building. There's different kinds of regression analysis. There's different kinds of specifications of variables, tests for goodness of fit, levels of significance, R squares, adjustment of R squares. Dozens of different things that one does to ascertain that a model has been built in accordance with the theory of that particular mathematical approach and to look at the results and see if they, in fact, are reasonably related to

the data that gave rise to them.

Q. So you anticipate then that these statisticians, whoever they are, that the defendants have employed will run an analysis on goodness of fit, for example, the R squared concerns of the model, the output of the model, things of that nature?

A. I would expect that.

Q. Do you need that information in order to render your expert opinions in this particular case?

A. That kind of information would allow my opinions to be more strongly held or less strongly held depending on what the results were.

Q. But you have been able to formulate opinions in order to give a deposition here today?

A. I have opinions.

Q. Concerning the models?

A. Concerning the models, the kinds of concerns that, you know, that could be allayed if statisticians report back that this is the greatest model since sliced bread. There are things that I am very concerned in the formulation at the general level that I have seen.

Q. Who provided you the list of variables

contained within the model?

A. Dr. Miller.

Q. Have you looked at the actual CD-ROMS?

A. No. I have looked at his report.

Q. What about the broad description? Again, you are getting that from Dr. Miller?

A. Yes. From Dr. Miller's report.

Q. Have the defendants or any consultant given you their description or their take on the model?

A. No.

Q. Has anyone other than yourself and anyone employed with Hugh Long & Associates given you their description or their understanding of the model?

A. No.

Q. Who are the clients, if you can tell me generally, of Hugh Long & Associates?

A. Most commonly we are retained by law firms most of which are in the New Orleans area, and the area major client is the American College of Physician Executives. That's on the educational seminar side. Occasionally we do seminars for other organizations, but those are usually one time engagements as opposed to a continuing

relationship.

Q. Who's your client in this case?

A. My client in this case -- I'm actually -- I was originally retained by the attorneys representing Philip Morris. My invoices have been paid by several different law firms in pro rata shares that they have determined among themselves.

Q. Well, are you testifying for the law firms, or are you testifying for the tobacco companies, Doctor?

A. I have been retained by and receive payment from the law firms who I understand are representing Philip Morris among others, and I am giving my expert opinion on the matters presented to me in conjunction with this litigation and in which the tobacco firms are the defendants.

Q. Do you consider yourself an expert for Philip Morris?

A. My general philosophy about expert testimony is that I am a friend of the court. I'm not advocating anyone's position.

Q. My question is do you consider Philip Morris your client in this case?

A. I consider Arnold & Porter my client.

Q. Why? Because they are paying your bill?

A. Because they retained me, and they ultimately have responsibility for my fees.

Q. Is there something wrong with Philip Morris being your client?

A. No. I have never talked to anybody who's employed by Philip Morris.

Q. Have you ever done any consulting work for the tobacco companies before?

A. No.

Q. Anything involving cigarettes?

A. No.

Q. How many people are employed at Hugh Long & Associates?

A. Besides myself, two.

Q. Who are they?

A. Cynthia Howlett-Willis, Valborg Gross.

Q. Cynthia is present here at the deposition here today, right?

A. Yes.

Q. What is her general background, or why is she employed with Hugh Long & Associates?

A. Cynthia has dual master's degrees in business administration and public health, and

works as my primary associate in doing research, data collection, data analysis in support of the various engagements.

Q. And the other gentleman's name?

A. Woman.

Q. It's a woman?

A. Yes.

Q. I'm sorry.

A. Valborg Gross is primarily an administrative person maintaining records, doing invoices, keeping track of the files, occasionally retrieving documents from the library, or making phone calls to obtain information or to order publications.

Q. So I take it then that it's really you and Cynthia doing the analysis --

A. Cynthia and I --

Q. Let me finish.

You and Cynthia doing the analysis for your opinions in this case?

A. That's correct.

Q. Did Ms. Gross contribute in any way to -- in terms of doing -- analyzing data for preparing reports generated in this case other than maybe typing?

A. She did not. I mean, she gathered some information from libraries, but did no analysis.

Q. At your direction?

A. At my direction or Cynthia's direction.

Q. Okay. Fine.

Have you met with any other experts that are involved in this particular case?

A. I have not.

Q. Any consultants that are involved in this particular case?

A. I have not.

Q. Attended any meetings where these consultants or other experts were present?

A. I have not.

Q. When were you first retained by the law firms in this particular case?

A. Approximately a year and a half ago.

Q. And that would have been sometime in 1995?

A. Right. Roughly October of 1995, I believe.

Q. Who first contacted you?

A. The first person that I talked to was actually a person, I believe, in the Jackson,

Mississippi office of Phelps Dunbar. I believe his name was Anderson.

He had obtained my CV from someone else. I don't know who. He talked to me --

Q. Reuben Anderson?

A. Thank you. Yes.

Talked to me a little bit about my background, my qualifications, whether I would like to explore such an engagement further. I indicated in the affirmative. He said that he would be passing my CV along to other attorneys in Washington, and I subsequently was contacted by Murray Garnick, and after initial meeting with Mr. Garnick I was retained to work on the matter.

Q. All right. So you have been working on the matter about maybe a year and a half?

A. On and off during that period of time, yes.

Q. I wouldn't normally ask you this. I haven't been able to locate any correspondence that would reflect your billing statements and things of that nature. Just out of curiosity, have you billed the law firms in connection with your work in this case through Hugh Long & Associates?

A. I have.

Q. To date if you can tell me generally amounts that you have billed?

A. I really don't know what the total is.

Q. Is it more than 100,000?

A. I am certain that it is.

Q. Is it more than 200,000?

A. I believe it is.

Q. Is it more than 300,000?

A. I believe it is not.

Q. Is it more than 250,000?

A. I don't know.

Q. Give me your best estimate between 200- and 300,000.

A. I would guess somewhere in the vicinity of 250, but I don't know which side.

Q. Can you give me a general definition of what a econometrician is? Have you heard that term before?

A. Yes. My appreciation is an econometrician is a person with a background in economics who primarily relies on statistical models for analysis for conducting studies, for drawing conclusions.

Q. Is it a recognized field?

A. There are societies of

econometricians. There may be some departments of econometrics around. Most commonly I hear departments of economics as being characterized as more classical or more on the econometric side as opposed to being sort of distinct fields.

Q. There may be a distinct field necessarily in your opinion between economics and being an econometrician?

A. My sense is that it really is sort of two branches within the general umbrella of economics as it's evolved over the last 30 or 40 years.

Q. Do you consider yourself an expert in econometrics?

A. No, I do not.

Q. Does econometrics involve -- We discussed models a little bit here. We will get into them a little bit more.

Does it involve the construction of models?

A. That would be my appreciation. That would be one of the primary activities engaged in.

Q. When we say "models," what are we talking about? What is your understanding in the field of health care economics?

A. Well, generally a model in economic context is attempting to describe reality through a set of typically mathematical relationships.

Q. I like that. I never heard it quite put that way.

Attempts to describe reality in -- I feel like I am in class taking notes. Attempts to describe reality in --

A. In primarily -- in -- using a set of primarily mathematical relationships.

Q. Can we call it modeling?

A. Sure.

Q. Is modeling something that is routinely done in the field of health care economics?

A. It's certainly one of the activities that is essential to research in health care economics, in attempting to understand things like the effects of different payment mechanisms, different public policy options.

Q. It helps you quantify the results of certain options. Is that right?

A. It may. It may allow you to make quantitative estimates of dollar amounts, for example, or things like access to care, how many people will, in fact, be reached by care

providers. Doesn't necessarily have to be dollars.

Q. This is something that I was curious about. Do all models use regressions, or are there certain type of models that use regression analysis?

A. Regression is one of the classes of mathematical equations that can be used for models. It's not the only one.

Q. What are some of the others?

A. There's a logistics which has a technical meaning different than the common language meaning models. There are probability models.

Q. What are logistics models in layman's terms?

MR. HELMS:

Let me just ask you to please let him finish the question. It's hard for her to take it down and it will make the record clearer. I'm sorry to interrupt both of you.

BY MR. YOUNG:

Q. What in layman's terms is a logistic model?

A. Simple regression models in their most

basic form are looking for straight line linear relationships. There are then a number of models that attempt to modify that to allow what in academic terminology is a relationship which says that there are -- relationships change over a range of values.

Logistics curves are one of a class of curves that there are models that could predict those kinds of relationships. There are probability models that look at likelihoods as opposed to absolute numerical linkages. There are nonparametric models.

There are dozens of these things that are developed sometimes in pure mathematics, sometimes in statistics, and then tend to get modified for different fields of study. You might modify something for a study in physics would be different than you would apply it to something in economics.

Q. So then modeling as you just described is something that is generally or routinely done in the field of health care economics?

A. In the academic research side of the field, right.

Q. I don't want to go down this road yet.

I don't want to get lost in some other area and not be able to get out of it right now.

Generally from your review of Vince Miller's report, which type of model that you just identified is it generally? What category would it fall in generally?

A. His report makes reference to a couple of different models. He talks about using a dummy model and a probit analysis which is one phase of the modeling. At another point, I believe, he makes reference to a logit model for estimating independent variables. He's using several different ones in here. These are, at the risk of some oversimplification models, that have descended from and/or in some respects more sophisticated than sort of the primary regression models that would start out at the -- looking for linear relationships.

Q. Okay. I got you. We will go into that later. I wanted to generally try to get this in a setting here.

It was real interesting a second ago, you mentioned that the field of health care economics in whatever branch we are dealing with uses regression models and things of that nature in

order to help quantify -- can be used to help quantity certain aspects of whatever the particular issue is that you're dealing with. Is that correct?

A. Yes. To attempt to make quantitative estimates or to quantitatively describe what the real world looks like.

Q. And they are estimates, is that right?

A. Yes.

Q. Are they to the penny?

A. Almost never.

Q. But still a scientifically valid process in your opinion?

A. Well, any particular model will be better or worse at, A, describing a particular set of information, and, B, being useful in predicting using other sets of information.

Q. Okay.

A. You can use a model simply as a descriptive model. I would like to understand the set of relationships in a given data set and stop there, or you could say I would like to have a model that I could apply to some new data set that I don't know about yet. I will build it on this set of information that I know about, and then move

it to a new section to pre-select something. Those are very different uses of models.

Q. Do you consider yourself -- I don't think you do. Let me ask you anyway. -- an expert in actuarial science?

A. I do not.

Q. What is your understanding of actuarial science?

A. My limited understanding of actuarial science is the forecasting of phenomenon in populations particularly from the perspective of risk management, so that you would typically expect to see actuarial work associated with doing something like setting insurance premiums where to do that one needs to forecast for a population the claims experience that would be expected such that the premium would be sufficient to pay claims and have a little something left over when you're done.

Q. Maybe this is not right. Do you ever use actuarial information in your work as a health care economist?

A. As an input, you know. Things that actuaries have produced. For example, when we talk about Medicare risk plans and the policy

implications of having Medicare patients sign up for an HMO like mechanism, we are using the output from the actuaries at the Health Care Financing Administration that forecast for us average per capita costs in various geographic regions around the country.

So we use that information. I use some of that information. We don't generate it.

Q. So actuarial science is a completely separate recognized field?

A. I believe it is. Certainly a separate professional area. Professional societies, professional certifications in actuarial science. Separate schools even, separate degrees.

Q. I don't want to insult you on this next one. I know you have a masters in about everything in public health. Epidemiology, does that play a role in your work in health management or health care economics?

A. Epidemiology is clearly important to health care management. Our students all take epidemiology as part of their Masters of Health Administration programs. I myself am not an epidemiologist. Again, like actuarial information, I use information produced by epidemiologists, but

don't personally generate it.

Q. So I will ask you this question. Do you consider yourself an expert in the field of epidemiology?

A. I do not.

Q. You have generally relied on epidemiological studies in the past?

A. Yes.

Q. Can you tell me in what context?

A. Again, in looking at issues surrounding health, and particularly, again, in the risk plan context of health maintenance organizations, managed care, capitated plans, in looking at the health characteristics of the population that they seek to enroll in those plans.

Q. You just have gone five miles over my head. I will come back and maybe we can try to be a little more focused. You told me that you used epidemiology in your work with -- Tell me again. I'm sorry.

A. The instance that I had in mind is in conjunction with the Prospective Payment Assessment Commission where --

Q. Was that a project you worked on?

A. This is an advisory body to the

Congress on which I sit as commissioner in Washington.

Q. When would that have been?

A. It's ongoing.

Q. You used epidemiology routinely then?

A. In conjunction with that work, yes.

Q. All right. This is called the Advisory Committee?

A. The Prospective Payment Assessment Commission. It is --

Q. It hasn't gotten an acronym by now?

A. ProPAC. One of two advisory commissions to the Congress on Medicare policy.

Q. Can you tell me from what you remember which epidemiological studies you have used or employed in your work with ProPAC?

A. Here what we have been looking at again is data collected by the Health Care Financing Administration that looks at the relative incidence of various medical conditions and utilization between those Medicare beneficiaries who chose to enroll in capitated plans and those who chose not to.

Q. The epidemiology would be in the form of?

A. Basically how healthy are those two different populations as reflected in their utilization of medical care services.

Q. Okay. So do you use epidemiology to fill in the medical science portion of what you do as a health care economist?

A. To a significant degree, yes.

Q. I guess like if I just go down to basics, you would use epidemiology as your starting tool as to causation in general, and then you would attach the epidemiology and maybe quantify in certain respects, or is that too general?

A. I am having trouble with the word "causation." Basically epidemiology would report to me relationships, associations, not necessarily cause and effect.

Q. Fine. You would defer then to an epidemiologist to say whether it was a causation or an association?

A. Or to a medical researcher.

Q. Okay. Fair enough.

It sets up the medical reality of disease --

A. Again --

Q. -- or the association?

A. The associations and, you know, tells you something about, you know, what you would expect a particular population's disease characteristics and consequently medical needs to be.

Q. Okay. Then would you take that and begin your work --

A. Yes.

Q. -- from there. Is that right?

A. That's correct.

Q. I think we covered this. I don't mean to insult you by this. I have drawn myself some general topics to cover. You don't have an MD, do you?

A. That's correct.

Q. You don't consider yourself an expert in the medical field, do you?

A. I do not.

Q. Okay. You said that you have been involved with Hugh Long & Associates since the '70s sometimes. How many times can you remember giving a deposition, Dr. Long?

A. I probably have given 30 or 40 depositions over that period of time.

Q. How about actual courtroom testimony?

A. Probably half that many.

Q. I may kick myself for saying this. Of the 40 times can you remember if you were working on the plaintiff's side or the defense side for cases?

A. I don't remember specifically for the depositions. In terms of matters we have been retained in, it splits almost exactly 50/50.

Q. I had a feeling your answer would be that.

You have been obviously in your work with ProPAC which is a Congressional committee --

A. Commission.

Q. Have you worked with the state legislature here in Louisiana?

A. I have never really worked with the state legislature. I once testified before a legislative committee here.

Q. Is that the only time you remember testifying before a legislative committee?

A. Yes. At the state level.

Q. I marked your CV. Can you tell me if you recall what that -- I have got it. We can touch on it. Hang on. It's been a while back. I think it was in 1977.

A. Yes. A long time ago. Joint Subcommittee on Health in January of 1977, testifying about health care costs. I think aggregate costs at that time. I really don't remember much more about the testimony except they were looking for explanations as to why health care costs were going up so fast. They were worried about it.

Q. That was in '77?

A. Right.

Q. Boy, they would be shocked today, wouldn't they?

Was your testimony transcribed, or do you know if it was published in any format?

A. I presume it was transcribed since it was a formal hearing. I have never had a copy of it.

Q. That would have been a formal hearing in 1977 before the Louisiana --

A. Joint Health Subcommittee of the Louisiana legislature.

Q. Any other states that you have testified before their legislative or regulatory bodies?

A. No.

Q. Congress, have you ever testified before Congress?

A. Yes.

Q. Could you tell me when? And I apologize for not remembering explicitly on here.

A. Testified on the Senate side in the mid '80s on legislation which I had a hand in drafting related to the payment of capital costs to hospitals in the Medicare program. Testimony on the house side both before the Subcommittee, Ways and Means Health Subcommittee, and the full Ways and Mean Committee.

Subcommittee, again, had to do with certain aspects of Medicare payment for hospital services, and the full panel testimony had to do with the changes in the overall pattern of health spending in the United States reflecting changes in managed care -- changes being caused by managed care and changes reflecting the change of site of care, location of care. Largely driven by technology and payment systems.

Q. Okay.

MR. HELMS:

You want to take a break?

THE WITNESS:

Sure. About that time.

(A break was taken.)

BY MR. YOUNG:

Q. Has Long & Associates done any work for government?

When I say "government," I will give you my definition. I mean county, or in your case parishes, state and/or federal.

A. Only if government was a party to some civil action. For example, I guess, you know if we included parish owned hospitals and if Jefferson Parish, East Jefferson General Hospital were a party to a suit in which we were retained, in that sense we were on their side, we would have been, I guess, working for government.

Q. Do you remember working for East Jefferson Parish Hospital?

A. Yes.

Q. When was that?

A. They were the defendant in an antitrust suit filed --

Q. Yikes.

A. -- by an adjacent hospital in conjunction with a preferred provider organization that had dropped the plaintiff hospital and

substituted the defendant hospital.

Q. What were you called upon to give testimony on in that case?

A. I was called to opine on what the intrinsic nature of the preferred provider organization business was, how they operate, the economics of putting together exclusive provider networks, the public policy purpose of that, and also whether or not had we gotten that far what demonstrable damages, if any, there would have been.

Q. Did you give a deposition in that case?

A. I did.

Q. What year was that?

A. I don't recall. It's been sometime in the '90s.

Q. Early '90s, mid '90s?

A. I don't remember.

Q. Was it near '90 or near '95?

A. Probably nearer '95.

Q. Again, was your client East Jefferson Parish Hospital, or was your client the law firm?

A. I don't remember who actually wrote the checks. I think in that instance I may have been contacted -- it was a funny case. There were two

defendants; the preferred provider organization and the hospital.

Within ten minutes I had calls from both of them after the papers were filed. In one instance I got a call directly from the organization itself, and in one instance I got a call from attorneys representing the other one. And then they spent some time deciding which defendant I was going to be working with.

Q. Who got you first?

A. Yes.

Q. Do you remember the law firm?

A. The law firm was Jones Walker, and whether they wrote checks to me or whether East Jefferson actually --

Q. Hang on a second.

A. In that case I worked very directly with the executives of East Jefferson. I don't really remember who wrote the check.

Q. Did you give a deposition in the case?

A. I did give a deposition.

Q. Did you keep a copy of the deposition?

A. If we ever received a copy, we have a copy.

Q. Can I get you, please, if you can, to

go back and try to find the style of the case, the name of the case that you worked on in that particular case, and provide that information to me, please?

MR. HELMS:

I will take that under advisement. I would prefer if you direct discovery requests to me, and we will do what we can to find them for you.

BY MR. YOUNG:

Q. Any other governmental entities that you can recall providing expert work for?

A. A long time ago. This is probably back in the '70s. I believe there are couple of instances where I gave testimony at an appeal hearing for certificate of need applications. I think I did one in Florida. I did one in Baton Rouge.

Q. Okay. Other than that?

A. I think that's it.

Q. Have you been retained to serve as an expert in any other state tobacco cases?

A. I have been retained in Florida.

Q. How about Louisiana?

A. I have not been retained in Louisiana.

Q. Were you asked to work on the Louisiana tobacco case?

A. I have not been as of this date.

Q. Of the $250,000 that you have been paid thus far --

A. I'm not certain that I have been paid.

Q. Believe me, my experts are saying the same thing.

Of the $250,000 that you have billed with regard to your expert testimony, is that dealing solely in relation to your work for Mississippi?

A. It is.

Q. How many meetings would you say that you have had over the course of the year and a half with the law firms representing the tobacco companies?

A. Probably six or seven.

Q. Have they all taken place here in New Orleans?

A. No.

Q. Where have they taken place?

A. I believe three of them took place in Washington D.C.

Q. At the Arnold & Porter law offices?

A. Yes.

Q. You told me already, and you correct me if I'm wrong, no other consultants or other experts were ever present at these meetings?

A. That's correct.

Q. Did Cynthia, and I should call you by your last name, Howlett-Willis attend with you?

A. The Washington meetings, yes.

Q. Where were the other meetings, here in New Orleans?

A. Here in New Orleans.

Q. I noticed on your CV that you had done some teaching in North Carolina before or held positions at UNC or Duke.

A. I was specially appointed at UNC Chapel Hill for the purposes of being a member of the doctoral dissertation committee of one of their doctoral students.

Q. How did that happen?

A. The chair of that student's committee because of the subject matter of the dissertation was looking outside the university because they didn't really have additional faculty there in that particular subject area, and had, I think, out of a committee of five, two from outside Chapel Hill,

myself, and a person from the University of Colorado.

Q. What about Duke University, or I may not have seen that on there? I thought I saw Duke University.

A. Nothing associated with Duke.

Q. You have never been employed with any of the tobacco companies, have you?

A. No.

Q. Are you originally from Louisiana?

A. No.

Q. Where are you originally from?

A. Ohio.

Q. When did you move to Louisiana?

A. 1969.

Q. Have you ever worked for an insurance company?

A. Only, again, in the sense of occasional defense work and personal injury lawsuits.

Q. Okay. Have you done any consulting work for an insurance company in terms of rate setting or work in the health care economics field?

A. Other than I once gave an educational seminar for some of the staff people at Pan-American Life.

Q. When was that?

A. In New Orleans.

Q. I'm sorry?

A. That would have been probably eight or ten years ago.

Q. Do you remember what the seminar was called?

A. No, I don't. The general subject was, again, changing trends in the health care industry, costs, and structure.

Q. Instead of going through every one of your many publications and committees you served on and everything, let me just ask you. In your work that's identified within the CV, other than what you are doing currently for the tobacco industry, do any of your publications, testimony, seminars, et cetera, deal in any way with the tobacco industry --

MR. HELMS:

Are you finished with the question?

MR. YOUNG:

-- and/or cigarettes?

MR. HELMS:

I object to the question as mischaracterizing his previous testimony. Go ahead

and answer if you can.

THE WITNESS:

No.

BY MR. YOUNG:

Q. You have written and/or published with regard to cost containment procedures. Is that right?

A. Yes.

Q. Are wellness programs a form of cost containment?

A. Generally we think of them that way. There is some contrary evidence.

Q. Right. Are smoking cessation programs part of a wellness program?

A. Could be.

Q. Okay. Do any of your writings or any of your testimony or other work deal with wellness programs that would include a smoking cessation program or recommendations for smoking cessation program?

A. No.

Q. Have you ever looked at the health care costs associated with cigarettes and/or tobacco?

A. Only in conjunction with the work on this matter.

Q. I will assume your testimony also includes your work within Tulane University and the courses you teach within Tulane University?

A. Yes.

Q. None of the courses in public health that you have taught or been part of deal with the cost of products or anything of that nature which would include cigarettes?

MR. HELMS:

Objection.

THE WITNESS:

I don't understand the "cost of products."

BY MR. YOUNG:

Q. Well, the health care costs. Do any of the courses that you teach or that you're involved with setting the curriculum in any way involve the health care costs of products to insurance companies, to governmental programs?

A. That's as explicit items. We talk about aggregate health care costs which would include, you know, costs from all sources.

Q. Well, you're saying that means implicitly they are there?

A. Right. When I say we spent 988.5

billion dollars in health care in 1995 in the United States, if there are costs associated with particular products, that would be in there.

Q. Do you know whether there are costs associated with particular products or not?

A. Undoubtedly costs associated with some products.

Q. What is the field of health care economics is the study of costs associated with some products called? How would you term that?

A. I don't know that I have a label for it.

Q. Well, if I wanted to look at costs associated with a product, where would that fall within the realm of health care economics?

A. Certainly a health care economist could choose to attempt to study the costs associated with any particular phenomenon.

Q. Let's deal with products. Okay? Consumer products.

A. That would be a legitimate area of inquiry for an economist.

Q. Has that ever been done? Do economists study that?

A. Economists study that.

Q. What type of products have you seen that economists have standardized?

A. Generally that I'm aware of, costs of things like alcohol, things like cigarettes, things like illegal drugs, things like automobiles.

Q. In your recollection of studies that have looked at the health care costs of cigarettes, which studies do you recall?

A. I don't recall specific studies. Most studies of that nature are things that I read about generally in the Wall Street Journal or the New York Times rather than reading the studies themselves or hear about in media news reports or see some general statements from sources like the Centers for Disease Control and Preventions or hear colleagues talking about.

Q. So you don't consider yourself an expert in determining the health care costs of cigarettes?

A. No, I do not.

Q. Some of your publications deal with models. They have the actual term "models" in there. Actually, I will identify a few of them for you so we don't have to go through the CV. Generic Model for Health Care.

A. It must have said more than that.

Q. It probably did. I didn't want to write the whole title.

Capital Asset Pricing Model, do you remember that?

Portfolio Selection, A Three-Part Model, do you remember?

A. Three-Parameter Model?

Q. You're right. I shortcut it again.

Capital Expenditure Review Model, do you remember that?

A. I think I know what that refers to.

Q. And Long Range Hospital Planning Model, do you remember that?

A. Yes.

Q. Are any of these models like the list of models that you gave me earlier?

MR. HELMS:

Which list?

MR. YOUNG:

Regression models, logistic models, probability models, and logit models.

THE WITNESS:

Could we go through the list one at a time?

BY MR. YOUNG:

Q. Yes, sir.

Regression models, logistic --

A. No. The list of the publications.

Q. I'm sorry. Okay.

This is all the result of a three-hour plane ride.

A. I can identify a couple of them. Three-parameter model was an extension of a model developed by Harry Markowitz back in the early '50s for portfolio selection, and --

Q. I don't want to interrupt you. Extension of a model? You took someone's earlier modeling work?

A. Earlier model which used two parameters and extended it to three parameters.

Q. You refined it?

A. Refined or made an extension to, made it more sensitive to some particular characteristics. These happened to deal with selection of common stocks.

Q. Is that done generally? Can economists take someone's model and refine it or make it more sensitive or things of that nature?

A. Yes. Yes.

Q. Now, what type of mathematical principles were present in this three-parameter model? What kind of model was it in terms of the types you described to me?

A. In the original Markowitz model, the mathematical portion of it simply had to do with alternative ways of calculating of the variability in distributions. It was not any of the types of models that we mentioned before of the econometric type. This was a model that compared different measures of dispersion, standard deviation, variance, semi-variance, and the trade-offs between risk characteristics and return characteristics in selecting stocks for an investment portfolio.

Q. Okay.

A. What I did was with Dr. Dill, my co-author, was refine the risk characteristics to include a third dimension.

Q. If I wanted to look at that sucker, where would I get that?

A. It was --

Q. Where would I get a copy of that?

A. In the proceedings indicated in the CV it was printed which could very well be found in a business school library.

Q. Okay. Do you think Tulane's business school has a copy of that?

A. It's possible.

Q. Let me think and go back to my list.

Did any of them, Generic Model for Health Care or the Capital Asset Pricing Model --

A. The Capital Asset Pricing Model is a model that was developed in the late '50s and early '60s which, again, was a spin-off and extension in a different direction of the Markowitz work. It was good enough that Markowitz and the two people who worked on the capital asset pricing model shared a Nobel Prize for doing so in economics, and the article that I wrote was taking that fairly daunting piece of work and translating it into a classroom so that you could actually present it to students in an understandable way.

That was what that article was about. Again, that model, I think, did, in fact, use some regression, linear regression, and log normal regression.

The Cost Quality Relationship Generic Model for Health Care that I co-authored with Dr. Clint is a conceptual model that was not mathematically based.

Did you have one more?

Q. Yes. Actually I had a few more. Before we leave that three totally, that three-parameter model, Markowitz model that you talked about, was the Markowitz model published with the literature?

A. Yes. Originally appeared in the Journal of Finance in 1950 or '51.

Q. Was it peer reviewed?

A. Yes.

Q. I am assuming it met acceptable criteria by the peers?

A. Yes.

Q. Then you took it and refined, made refinement to the Markowitz model?

A. Yes.

Q. You said that was scientifically valid, I think, in order to make such refinements to a peer reviewed model?

A. Yes.

Q. Was your model subsequently peer reviewed?

A. Not in the sense of a publication in a refereed journal. It was reviewed by a panel for the presentation at these academic meetings of

where it appears in the proceedings.

Q. I guess, Dr. Long, the long and the short of it, you don't believe that because your refinements to the model were not peer reviewed they were any less scientifically valid, do you?

A. I think the answer is yes. I don't -- Read back the question.

Q. I'm sorry. That was a horrible question.

Do you think the fact that your refinement to your peer reviewed Markowitz model were not peer reviewed make your refinement any less scientifically valid?

A. I do not believe they were any less scientifically valid.

Q. We talked about the capital asset pricing model. You said it involved some regression along with some other mathematical things. Where is that? Is that where I can get a copy of that?

A. It appeared in -- it developed over a whole series of articles that were published in the Journal of Finance, Journal of Financial and Quantitative Analysis, the Journal of Financial Economics during the period of time about 1967

through probably 1978.

Q. Okay.

A. It's a whole collection of articles reporting various steps in the process.

Q. Okay. The Portfolio Selection Three-Part Model, is that the one we talked about?

A. Yes.

Q. Let's go back to the Generic Model for Health Care. Did you find that one?

A. Yes. That was not a mathematical model.

Q. Scrap that one then. What kind of model was it?

A. I would just say conceptual. It was hypothesizing certain relationships between cost and quality, looking at different definitions of quality. There was a follow-on to that which did do some regression-type analysis. Let me find it. Toward a definition of quality that I also did with Dr. Clint which took that conceptual model and with some survey data and attempted to discern some relationships between physician decision-making and outcomes, and that --

Q. Could you tell me where that is?

A. That used some mathematical analysis in

it. That was published in Physician Executive in 1989.

Q. Can you tell me where?

A. On the new CV in the middle of Page 9.

Q. Let me grab the CV.

The emergency departments?

A. The one right below that.

Q. Toward a definition of quality. What does the "R" stand for?

A. Refereed.

Q. So this was for -- you were applying the results for what towards what? Was it a study?

A. It was a study that involved survey data of physicians, and their decision-making as it related to certain measures of quality.

Q. Okay. What context was the study going to be used in? I guess the results of your findings, how were they to be used?

A. We did not anticipate any particular further application. This was a descriptive paper to try to stimulate some thinking among physician executives about the way in which they approach patient care decisions.

Q. So the findings could have assisted any hospital?

A. Well, it was more in the instance of physician decisions rather than institutional decision.

Q. Any physicians?

A. Yes.

Q. Were they limited to the State of Louisiana physicians?

A. No. The survey was national.

Q. Okay. This was a survey that you conducted yourself? You took some survey data?

A. It was a mail questionnaire that we developed and sent out to a non-random sample of physicians, physicians who were in managerial positions.

Q. Across the country?

A. Across the country.

Q. You could draw conclusions from the across the country sample on physicians maybe anywhere, managerial physicians anywhere within the U.S.?

A. No. What we did was simply report what our sample told us. We did some statistical tests. The significance on that sample to indicate that the numerical conclusions we were drawing, you know, told us to a level of statistical certainty

that we were accurately describing the responses from the sample. We did not either suggest or advocate that that had any predictive value with respect to what some other sample of physicians might respond.

Q. Let's go on.

I am totally lost now, out of that. That's not your fault. That's my fault.

I think we had a few others on that list. The Capital Expenditure Review Model, did we talk about that one already?

A. We did not.

Q. Let me see if I can find it.

It's actually on Page 6 of your old CV at the bottom. I will ask you about both of these at the bottom.

A. Okay.

Q. Those were the last two left on my list.

A. These were not papers that I authored. These were papers authored by others that I was a discussant of at academic meetings.

Q. Do you know what kind of models they involved?

A. I frankly don't remember. It's been

over 20 years ago.

Q. You didn't author them or anything?

A. No. I didn't author them.

Q. Okay. You also list on your CV from '89 to '91 that you were involved somewhat with the RWJ, Robert Wood Johnson Foundation. Do you recall that?

You have a puzzled look on your face. I will find it for you on here.

A. What category are we in?

Q. That, I don't know. Good deed doer probably. Let's see.

It's under the "Other Academic Activity." Actually on Page 13 of your prior CV. Faculty member for the Robert Wood Johnson Foundation program.

A. This was a program funded by RWJ at Johns Hopkins that founded an educational program which they called Faculty Fellows In Health Care Finance. It was taking faculty members from universities around the country or persons who were in positions in government or foundations who may have had training in management or may have had training in accounting, but who were not familiar with the particular characteristics of the world of

finance as it relates to health care sector.

They would spend several months in seminars at Johns Hopkins in Baltimore, and then had a field experience with a health provider organization or a governmental organization in the health arena. During these three years this grant ran, I was invited to come to Johns Hopkins each year for several days to participate in one of those seminars as a member of the faculty. The grant was not renewed at the end of the three-year grant period. It disappeared.

Q. Okay. I see on your CV you were a speaker at the Society of Hospitals Planning Hospital Needs under a, quote, "competitive market/government cutback scenario."

A. That was, I think, the spinoff from the American Hospital Association. Let me see if I can find it.

Q. Maybe I can help you find it on here. That's what you get for doing so much stuff.

A. Yes. 1982, the Society of Hospital Planning was a spinoff association from the American Hospital Association, and this was a society which had come in to being as a result of public law 93461 which is a national health

planning legislation back in the '70s.

What was happening at this point in time was a backing away from that regulatory mechanism that had been fostered by that federal legislation which was the move to certificate of need legislation at the state level. A number of states were beginning to back away from that, and the question was as that happened, what was going to happen to, you know, hospitals as they moved into a more competitive situation where basically you weren't going to get a franchise that this hospital got to, you know, invest in this particular expensive technology, but they couldn't build more beds and this hospital could build more beds, but they couldn't have the expensive new technology to one where it would be more of a free for all, and both hospitals could buy both things if they wanted to at the time that the federal government was beginning its serious retrenchment in Medicare funding under the Tax Equity and Fiscal Responsibility Act of '82, and the prospect of prospective payment and so, you know, I talked about at that meeting the, you know, what was going to happen to hospitals, particularly nonprofit hospitals, and their need to access capital to be

able to remain competitive in an environment where there was going to be less franchising of capital expenditures and less public money in these Medicare programs to fund that.

Q. Is it fair to say that your role as an advisor and a teacher, speaker, advisor to governments that you played a role in identifying ways to contain rising health care costs?

A. I have played a role in that, yes.

Q. Do you have a -- I can look on the CV -- a Masters in Public Health, too?

A. I do not.

Q. Your work with the Chancellor State Health Affairs Committee --

A. That was within the university. The chancellor is the chief executive officer of the medical center, and this was a small advisory committee that the chancellor of the medical center put together as we moved in to the likelihood of restructuring the relationships between the Charity Hospital system and the medical schools here in Louisiana which is very recently coming to fruition in the current session of the legislature in which the Louisiana State University Medical Center which is also here in New Orleans will have

administrative control over the Charity Hospital system for the first time since that system came into existence over 60 years ago.

This advisory group was ensuring that in our discussions with the state legislature that all of the considerations of that change of control were fully recognized in terms of protecting the teaching programs of Tulane University.

Q. Do you think changing this control of the Charity Hospitals will help in terms of rising health care costs?

A. I'm not especially optimistic about it having a salutary effect on costs in this state.

Q. Why in your opinion as a health care economist is it important to curve these rising health care costs that you talked about today from the public standpoint, not a private insurance company standpoint?

A. I characterize myself as a laissez-faire economist, meaning one that believes that markets should be given a chance to work and that you step in and intervene in those markets only when the market proves that it can't work.

As such, there is from my perspective no right or wrong level of health care costs in the

aggregate so that I don't concern myself particularly with saying, oh, health care costs ought to be 10 percent of gross domestic product or 12 percent of gross domestic product. That number doesn't matter to me. What I am concerned about is the mechanisms by which we get to whatever level of health care spending, not the level itself.

The major policy concern that I have expressed over the years is that in the way in which we have paid for health care, we have in our both private insurance mechanisms and in our public payment mechanisms, and I really exclude Medicaid here for reasons that I can detail if you're interested, but for the population that has the capacity to pay for at least some portion of their health care services, our insurance mechanisms have largely insulated the consumer of health care goods and services, the patient, from their actual costs by having very low deductibles, very low co-payments by having first dollar coverage, by having managed care prepaid plans so that health care tends to look like a very low cost or even free good.

Because it appears to be such a low cost good, because it appears to be free, because

that cost is not visited either on the physician who ordered care and manages care or on the physician or on the patient who receives it, there's no disincentive to consuming care which is only marginally valuable or perhaps not valuable at all. Because it's free, we buy a lot of it, and we bought too much.

I wouldn't care that health care is 13 percent of GDP right now if the way we had gotten to that was by people spending their own money for routine, ordinary services with insurance playing the role of true insurance, and protecting against high cost episodes, catastrophic events, you know.

I don't buy house insurance to pay for cleaning the carpets every week. I buy house insurance in case my house burns down. That's not how we have behaved in the health care arena.

Q. Government funded health care, is it important to curb health care costs of government funded health care?

A. Depends on which government funded health care we want to talk about. If we want to talk about Medicare, for example, I think it is critically important to constrain some of the practices that you have engaged in in paying for

Medicare services for some people.

For example, we fund hospital care under Medicare. We fund skilled nursing care. We fund home health care under Medicare with a payroll tax. So the guy flipping hamburgers in the fast food joint for six bucks an hour is paying payroll taxes that go into the trust fund that, among other things, buys free medical care for rich people. I have both a philosophical and economic problem with that kind of wealth transference. I believe that Medicare should be means tested, that we shouldn't pay the same for rich people that we pay for less rich people.

If you want to talk about Medicaid, also governmentally funded, I think that is a different, conceptually different program in which by and large we are providing services for persons who could not otherwise afford them and/or providing funding so that health care providers will physically be co-located with the population needing the care. In other words, access question, and I am much less concerned about the Medicaid program as either an economic driver of costs or as a philosophical reallocation of wealth than I am about the Medicare program.

Q. Is your testimony we should not curb health care costs related to Medicaid?

A. My testimony is that we should exercise all due diligence to ensure that we get what we are paying for, that we avoid waste, inefficiency, fraud, that we ensure that we focus on the public policy objectives of the program which is to improve the health status of that segment of the population which is medically indigent and improve their access to care, and as long as we have that segment of the population, then I believe we should spend what is necessary to efficiently provide to them medically necessary care until such time as their economic status changes so that they can join the mainstream mechanisms.

Q. You mentioned improve the health of the indigent population.

A. Their health status, yes.

Q. Is that a way to curb health care costs?

A. No. If my only objective was to minimize health care costs, then I would not provide them any health care at all.

Q. That's not my question. Is improving the health of the indigent population a tool in

curbing health care costs?

A. In the aggregate, quite possibly. In the Medicaid program itself, certainly in the short run it is not.

Q. But in the aggregate meaning long-term?

A. Long-term and, you know, in the hope that some of these people move out of the Medicaid entitlement.

Q. I am not talking about the economic status, Dr. Long. I am talking about their health.

A. Then I misunderstood the question.

Q. Is improving the health of the indigent population in the aggregate a tool in curbing rising health care costs?

A. In the aggregate?

Q. Over the long-term.

A. In the long-term, it may reduce aggregate health care costs.

Q. What is the American College of Physician Executives? You mentioned that a couple of times today. I have seen you actually authored several publications that have appeared in their journal. That is what exactly?

A. It's a personal membership association

of physicians who are either currently engaged in or aspire to be engaged in managerial positions within the health care industry.

Q. You're a member of that organization?

A. I am an honorary member of the organization. To be a real member, one has to be a physician.

Q. Okay. Can we take a break?

(A break was taken.)

MR. HELMS:

Before you ask some more questions, there was something Dr. Long wanted to mention about something he had said earlier.

THE WITNESS:

I wanted to amend or add to one of my answers to one of your earlier questions concerning having done work with government.

BY MR. YOUNG:

Q. Okay.

A. Just to be very explicit. Obviously my involvement with the Prospective Payment Assessment Commission and the Degree Classification Review Board is work for the federal government.

Also I neglected to mention in the past I have also done work for the Orleans Levee

District which is a governmental agency that is responsible along with the Corp of Engineers for the levees around the City of New Orleans, and I have done consulting work with them in connection with their self-funded employee health plan.

Q. The Orleans Levee Board?

A. Yes. Technically the Orleans Levee District.

Q. When did you do that work?

A. That's been an ongoing engagement. It probably stretched over seven or eight years now.

Q. It's ongoing?

A. Yes.

Q. Who is your contact at the Orleans Levee Board?

A. The executive director is the direct contact, and there have been two or three of those in that period of time.

Q. Who would know you if I called the Orleans Levee Board and said, "I would like to see some work Dr. Long has done for you"?

A. The person who would be consistently there throughout this period of time would be Peggy Wheat. She's in the personnel area. Personnel area. Carol --

MS. HOWLETT-WILLIS:

Keifer.

THE WITNESS:

-- Keifer directly works with insurance matters.

BY MR. YOUNG:

Q. What were you doing with their state funded health plan?

A. Self funded.

Q. Sorry.

A. Over the years at various times they put out requests for proposals for third party administrators, for umbrella stop loss coverage, for utilization review, and we have advised them on the structuring of those RFPs and have also assisted them in costing out the responses to those RFPs and making recommendations to the board for their consideration.

Q. Is that a state funded plan, or do the employees fund it themselves?

A. It's a combination. Employees make their deductions from employees' monthly checks that go toward it, and then the district budgets its own contributions. It is a self-funded mechanism as opposed to going out and buying

insurance on the market until very recently when for the first time they have used a health maintenance organization.

Q. When you say they contribute out of their check, are they contributing for adding dependents to the plan or contributing for themselves, too?

A. For dependents.

Q. So the employees themselves are being paid for by the state or by the Orleans Parish?

A. By the Levee District, yes.

Q. Does that state funded plan allow for rate setting?

A. Historically the plans have embodied preferred provider organizations which have negotiated either fee schedules for per diems with health care providers. It's been basically until this past year a fee for service, fee schedule type of plan.

Q. I guess maybe I didn't word my question correctly. Do they, for instance, if someone is an abusive drinker that's an employee of the Orleans Levee Board, do they get a deduction at all for themselves for being on the plan? Do they get a deduction on the payroll? Do they have to

contribute extra?

A. Do they have to pay more?

Q. Yes.

A. No.

Q. There is no rate setting with regard to alcohol?

A. Inside the plan. The only consideration on the rate setting or employee contributions, if you would, is simply the nature and number of dependents.

Q. Is another word for rate setting or another way to describe it as risk allocation?

A. Or risk adjustments.

Q. There is no risk adjustments on that plan?

A. That's correct.

Q. Have you advised putting in place risk adjustments for that plan?

A. No, we have not.

Q. Have you advised one way or the other?

A. No.

Q. What are risk adjustments? What are types of risk adjustments?

A. Such as you suggest, if there was some particular characteristic of the insured person

that there would be a change in the amount of money required to participate in the plan.

Q. In your knowledge of health care economics as it pertains to health insurance plans or health plans in general, I guess, what are types of risk adjustments?

A. That are actually implemented?

Q. Actually or may be implemented.

A. Generally the health sector has moved away from risk adjusting on the individual level. The jargon for that in the insurance industry is experience rating. As a general proposition, that has been looked upon with disfavor from a public policy perspective in favor of what's called community risk rating which is to establish premiums or rates on a broader base and spread individual risk throughout the risk pool.

The extreme form of experienced rating is refusing to cover anyone at all, for example, with a preexisting condition.

Q. What are some nonextreme forms of risk adjustments?

A. Nonextreme forms would be what we see in some other types of insurance like flood insurance. If you're in the flood plane, you pay a

higher rate than if you're not in the flood plane.

Q. We are not talking about flood insurance. I am directing my questions to health insurance plans.

A. Someone who is HIV positive.

Q. Name some others.

A. Smokers, nonsmokers, persons engaged in particularly dangerous activities, offshore worker or someone who races automobiles, things like that.

Q. Why is smoker, nonsmoker a risk adjustment?

A. It has been used primarily as a risk adjustment in things like life insurance because of actuarial studies that show different life expectancy for smokers and nonsmokers, and it has -- I have never actually seen it implemented in an employee -- employer provided health insurance mechanism. Very often employers offer coverage for smoking cessation programs at little or no cost to employees on the theory it will lower the employers' health care costs in the future.

Q. Why is that?

A. Why do they do it?

Q. Why would it lower their costs in the

future?

A. The theory is that it would result in fewer medical care claims if that employee stayed with that employer over some long period of time.

Q. Why would it result in fewer medical care claims?

A. I don't know that it would. I am telling you what the theory is.

Q. Okay.

A. But, in fact, I have not actually seen employers charge differential rates, or commercial insurers for that matter, because of the very strong public policy push to community risk rate.

Q. How many group health insurance plans have you done consulting work for?

A. That's the only one.

Q. How many private insurance plans have you done consulting work for?

A. Could you tell me what you mean by "private insurance plans"?

Q. Personal health insurance as opposed to group health insurance.

A. None.

Q. Where is that theory that you just identified written or present? Where would I look

to see this theory of eliminating smokers to save medical care costs to my program?

A. I don't have a specific citation.

Q. How do you know about the theory?

A. That is the explanation that I have heard for employers saying that they want to include this as a benefit at no cost to the employee.

Q. So you just in all your work --

A. That's what they tell me.

Q. In all your work as a health care economist, just by word of mouth you have heard it?

A. I have not seen or looked for a definitive study.

Q. Do you have any reason to disagree with that theory?

A. I have no reason to agree or disagree with that theory.

Q. Do you believe that human disease results in health care services?

A. Treatment of human disease results in health care services.

Q. And do those treatments or services for that human disease result in expenditures?

A. By someone, yes.

Q. Is there a difference between disease in your opinion and other medical conditions? Do you draw a distinguishing factor between disease and other medical conditions?

A. Well, again, I'm not an expert in the technical medical classifications. Things like trauma. In some context they are considered distinct from disease processes.

Q. For instance, do you consider things like such as malnutrition, would you consider that a disease, or would you consider that a condition?

A. Generally my lay appreciation is that a disease would involve some particular agent interacting with the human system that ill health can derive from disease. It can derive from general environmental conditions. It can arise from trauma or accident to the body. It can derive from genetic pre-conditions, but I, you know, the formal drawing of bright lines along those various categories and saying -- I know there are some people in the public health area in my school who would broadly define disease to include all manner of public health phenomenon and some people who wouldn't.

Q. I want your understanding. Okay?

A. If you talk to a physician, he would have a much narrower definition classically than a public health person.

Q. A low birth weight baby, would you classify as a disease if you were looking for the disease expenditures? Is that a disease or condition?

A. My inquiry would be what are the result cost, and are those costs, the use of resources something that occurs within what we define to be the health care industry. If the answer is yes, then it doesn't particularly matter to me whether we happen to label it is disease or label it something else. If it requires the use of physician services or nursing services or medications, then I'm interested in it.

Q. Do you think low birth weight babies have higher expenditures, medical expenditures than normal weight babies?

A. If they are talking about extremely low birth weight babies, then they would have higher expenditures than normal birth weight babies because of the probable use of neonatal intensive care for some period of time immediately subsequent to birth, for example.

Q. Are you familiar with birth weight categories? When you say extremely --

A. Again, in just informal conversations or reading lay press, I know that there's often dividing lines drawn around 600 grams for some categorical purposes. I don't know the medical basis for making or drawing the line.

Q. So do you have an opinion as to at what weight a baby -- what lower weight a baby would have higher medical expenditures than a, quote, "normal weight baby"?

A. No, I don't try to make those definitions. If someone presents to me a category and says this is how we define it and here are the expenditures for this group and here are the expenditures for the other group, then, you know, I don't try to invent the definitions.

Q. Have you done any systematic studies with regard to low birth weight babies and their medical expenditures?

A. No, I have not.

Q. Do you have an opinion one way or the other whether cigarette smoking causes disease or conditions, whichever way you want to phrase it, in humans?

A. From an economist perspective, I am aware of very strong associations between smoking in certain quantities, for certain periods of time, and the incidence of some disease conditions. Very strong associations in some instances, less strong in others. Economics doesn't deal with the causation per se.

Q. You relate that --

A. Which is a medical judgment.

Q. You leave that to the medical and epidemiological community?

A. Yes.

Q. Do you have any reason to disagree with your university's position on cigarette smoking and the diseases it causes?

A. I'm not aware explicitly of my university's position.

Q. Do you know what the university position is?

A. I don't know what the university's position is.

Q. Have you asked?

A. I haven't asked. I would be surprised if they had one as the university.

Q. Is the medical center part of the

Tulane University?

A. It is a part of Tulane University, yes.

Q. Let me rephrase it. Do you know what the medical center's position is with regard to cigarette smoking?

A. I don't believe they have taken an official medical center position.

Q. If they have, I take it, you weren't part of that decision-making process?

A. If they have, I was not.

Q. If cigarettes cause disease -- Let's say your university says it does. Let's say your university says it causes lung cancer, cardiovascular disease, low birth weight babies. Would you have a reason to disagree with that?

A. One of the joys of academe, we have academic freedoms. One is not under an employee/employer obligation to agree with an administration about anything. I have no reason to disagree or agree with that as a matter of professional expert opinion.

Q. All right. Well, you earlier talked about that you believe or you have seen literature anywhere in your field that shows a strong association between cigarette smoking and certain

diseases.

A. Yes, sir.

Q. Less strong for some, more strong for others. What is that based on?

MR. HELMS:

Objection to the question. It's vague.

BY MR. YOUNG:

Q. Where did you learn of these associations?

A. Again, from combinations of reading general literature, from conversations with colleagues.

Q. Let's stop first at general literature. What general literature are you referring to?

A. Reports of research that appear -- reports that appear in things like the New York Times or the Wall Street Journal or even the local newspaper reporting on articles in the Journal of American Medical Association or in the New England Journal of Medicine.

Q. Do you consider the Journal of American Medical Association an authoritative publication?

A. The portion that is refereed.

Q. What about the Surgeon General's Report?

A. The Surgeon General's Report would be another item in that list of things.

Q. You're gleaning information on associations here is what I am trying to get to. Would you consider the Surgeon General's Report an authoritative document in order to look for these associations that you have talked about?

A. It would be a document carrying weight, yes.

Q. Well, a lot of weight? Not a lot of weight? Is it generally relied upon by health care economists?

A. I don't know that health care economists rely on any of these kind of things per se. It would not in academe carry the same weight as a refereed journal article. To the extent that the surgeon general relied upon such studies, controlled studies, studies performed by CDC&P, then that lends additional authority and weight.

Q. Well, if the surgeon general compiled every report from the CDC and every other report and compiled it into one synopsis, would that be authoritative to you?

A. If the question is would that make it more authoritative than the source material itself, only in a political sense. Not in a objective sense.

Q. How would it not be in an objective sense?

A. Because the surgeon general noted any empirical evidence, that is it merely reached a judgment based on empirical evidence which is directly accessible.

Q. Is that a reliable way to do it?

MR. HELMS:

Objection. Vague. Do what?

BY MR. YOUNG:

Q. Reach conclusions?

A. I have no objection to the surgeon general doing that. All I am saying is that the sum total of the individual studies, I would think, speak for themselves. If it is desirable for broad communications to the public to package those under the good offices of the surgeon general, that's fine. It doesn't make the original studies more or less true.

Q. Can you tell me again the general literature that you have looked and seen this

strong association between cigarette smoking and disease?

A. Primarily media reports on controlled studies conducted by the medical community.

Q. In looking at the issue of epidemiology, for instance, when you're -- in your work as a health care economist, you go to newspaper reports first in order to get your information concerning epidemiology? Is that your primary source of gathering your epidemiology information?

A. You asked me where I had obtained my impressions about the associations between smoking and disease. If the question is instead where would I look for authoritative citations in doing formal health economics work, then I would go directly to the studies in the refereed literature.

Q. Where do you go to find the studies?

A. I would probably do a Med Line search to start with and go to the on-line or the paper libraries and obtain copies of the publications themselves.

Q. Other than newspapers and doing a Med Line search, any other sources that you would like?

A. Which purpose are we talking about?

Q. Your epidemiology arm of any kind of health care economic study.

A. For health care economies work, I wouldn't be using newspaper at all, of course. I would be going to the original data sources.

Q. But in this case, your knowledge is just that of accounts in newspaper articles, things of that nature?

A. I have done the literature search I just described. I am not, you know, being asked to, you know, do research in this area.

Q. You mentioned a second ago you would go straight to the original data sources.

A. To the publications.

Q. What type of data sources are we talking about in order to look at the epidemiology?

A. We would be looking at basically the medical or epidemiological literature done in controlled studies that would seek to establish causation. These would be articles that would appear in refereed journals such as the ones I mentioned as well as specialty areas. There could be things in the American Journal of Public Health. There could be things in the oncology

literature. There could than things in the journals of medical specialties dealing in these areas, be it oncology or pulmonology.

I don't know an exhaustive list of where those articles may have been published. You know, that would not be a difficult thing to ascertain.

Q. Let's get back to where we were. If cigarette smoking does cause disease in humans and disease requires medical services which result in expenditures to someone, is it your opinion that cigarette smoking in that scenario does cause medical expenditures?

A. If it does cause medical expenditures, yes.

Q. Do you have any reason to disagree with that?

A. No.

Q. Do you believe cigarette smoking results in medical expenditures?

A. I believe cigarette smoking results in some medical expenditures.

Q. Do you believe cigarette smoking results in higher medical expenditures for the cigarette smoker than for nonsmokers?

A. I don't know.

Q. Why do you not know?

A. Because if we are talking about total medical expenditures for that individual, then if smoking makes a difference in their health status, in their life expectancy, in their cause of death, then it becomes a very complicated question given that everybody as far as we know is going to die of something and as a general proposition it will cost something to die. We are talking about a difference in amount and difference in timing that may or may not be larger overall. I don't know. I just don't know.

Q. I understand. You just described for me a lifetime analysis, haven't you?

A. Yes.

Q. What is a nonlifetime analysis called?

A. Well, in epidemiological circle, I guess, we talk about incidents.

Q. And health care economy cost evaluations is prevalence approach or incidence based approach?

A. In economics we probably talk about cross-sectional approaches as opposed to longitudinal.

Q. Looking at two individuals in a given year?

A. Right.

Q. Now, nonlifetime approach, two individuals in a given year, does the smoker cost you more than the nonsmoker in medical expenditures?

A. May or may not depending on smoking history, morbidities.

Q. Do you know one way or the other?

A. I don't know one way or the other.

Q. You would have to have more facts?

A. I would have to more facts.

Q. Have you ever done any analysis of that?

A. I have not.

Q. As you said earlier today, you don't consider yourself an expert in quantifying cigarette health care costs?

A. That's correct.

Q. Have you constructed any econometric models yourself?

A. For any purpose?

Q. Yes.

A. In my doctoral dissertation I

constructed an econometric model.

Q. What did it look like?

A. The ratings assigned to domestic utility bonds by Moody and Standard and Poors.

Q. Is your doctoral dissertation listed on your CV?

A. I guess it's not. It's not.

Q. What is the name of it again?

A. I'm not sure that I will remember the formal title correctly. I believe it is "An Analysis of the Determinants and Predictability of Agency Ratings of Domestic Utility Bonds."

Q. When did you complete your dissertation?

A. In 1971.

Q. Is that at the Tulane library?

A. I don't believe it is at the Tulane library.

Q. Where could I get a copy of your dissertation?

A. At the Stanford University School of Business library. It may also be available from University Microfilms in Ann Arbor, Michigan.

Q. Any other econometric models?

A. No.

Q. So do you consider yourself an expert in econometric models?

A. No.

Q. Is there a separate field called survey data, or can one become an expert in survey information?

A. I am certain one could. I would generally consider that probably some subset of the general area of statistics.

Q. Do you deal with survey data?

A. I sometimes deal with survey data.

Q. Do you consider yourself an expert in survey instrumentality, collection and application of survey data?

A. Depending on the application or the survey data, I may be an expert in that. I do not consider myself an expert in instrument construction or survey design.

Q. Is any of the testimony that you plan to give in this case going to involve the Mississippi Comprehensive Health Plan?

A. I have not been asked to do anything concerning that aspect of the pleadings.

Q. Have you looked at any data from the Mississippi Comprehensive Health Plan?

A. Only what purports to be data from it contained in Dr. Miller's report.

Q. Do you have any reason to challenge that data?

A. I haven't looked at the data.

Q. Are you planning to?

A. I haven't been asked.

Q. What about University of Mississippi Medical Center?

A. I haven't been asked to.

Q. UMMC?

A. I have not been asked.

Q. Do you have any reason to challenge that data?

A. I have no basis for that.

Q. Do you plan to look at the data from the UMMC?

A. Only if I'm asked to.

Q. Do you have any, or are you going to provide any opinions with regard to the operation of the Mississippi Comprehensive Health Insurance Plan?

A. I have not been asked to do that.

Q. Have you reviewed any documents related to the Mississippi Comprehensive Health Plan?

A. I have not.

Q. Do you plan to offer expert opinions with regard to the University of Mississippi Medical Center in terms of its uncompensated health care?

A. Only insofar as there is payment within the Medicaid mechanism for uncompensated care.

Q. We are talking about DISH?

A. We are talking about DISH.

Q. But the general operation and charges and things of that nature by UMMC, you're not going to offer expert testimony?

A. I have not been asked to do that.

Q. Do you know what the smoking policy at Tulane University is?

A. I don't know what the smoking policy at Tulane University is.

Q. Did you have any input with regard to the smoking policy or the establishing of the smoking policy at Tulane?

A. No.

Q. Do you smoke personally?

A. I do not.

Q. Do you have children?

A. I do.

Q. How old are your children?
A. Twelve and seven.
Q. Do they smoke? Does the twelve-year-old? I hope the seven-year-old doesn't.
A. To my knowledge, they do not.
Q. Are you married?
A. I am.
Q. Does your wife smoke?
A. She does not.
Q. Have you ever smoked?
A. No, I haven't.
Q. Are you any relation to -- You knew this was coming.
A. Every deposition.
Q. -- to the former governor?
A. No relationship to the former governor, blood or otherwise.
Would you like to buy a bridge?
(Off the record.)
BY MR. YOUNG:
Q. How did you familiarize yourself with the Mississippi Medicaid program? You looked at documents obviously. Is that right?
A. Yes. I looked at annual reports from

the Mississippi Office of Medicaid. I looked at the Title 19 State Plan, both current and previous versions. I looked at filings of HCFA, forms filed by the State of Mississippi with Health Care Financing Administration.

Let's see. What else?

I looked at other studies that included data on Mississippi such as the Kaiser Commission on the future of Medicaid.

Q. What is Kaiser? Is it a corporation? Is it a commission that funds different projects?

A. There are several different things named Kaiser.

Q. Kaiser in this setting refers to what?

A. Refers to a commission which I don't happen to know their funding history, but which over the years has produced a number of reports or white papers on various aspects of the Medicaid program, generally as national documents, but supported with information state by state.

Q. Did you rely on the Kaiser, this Kaiser information in formulating your opinions?

A. In some of my comparison data and statistical information, I have used information from the Kaiser reports.

Q. I am assuming you looked at the documents from the inception of Medicaid if you could find them through 1996?

A. Through the inception of Mississippi Medicaid.

Q. That's what I meant. Through 19 --

A. Through actually we have some documents more recent than 1996 such as budget requests for fiscal year 1998. There are other -- I'm sure I haven't given you an exhaustive list. That's all I remember off the top of my head right now that are Mississippi plan specific.

Q. You reviewed some testimony, some transcripts?

A. Yes.

Q. Which ones do you recall reviewing?

A. I reviewed Dr. Courier's.

Q. She doesn't work with Medicaid, does she?

A. I'm sorry. Did you just mean Medicaid?

Q. That's okay. I just asked if she worked with Medicaid.

A. No. She is a state epidemiologist for Mississippi.

I have seen Dr. Oster's deposition.

Q. Does he work with Medicaid?

A. Not with Mississippi Medicaid, no.

Ms. Patterson, I believe, with the Mississippi Hospital Association.

One of the persons with Medicaid, Mr. Peterson.

Is that right? I'm not sure if I have the right name on that. I don't know that I have that here.

Q. Bob Pilgrim maybe?

A. Pilgrim. Pilgrim.

Q. Is he the only testimony that you can remember reviewing that actually worked at Medicaid, at Mississippi Medicaid?

A. At Mississippi Medicaid, yes.

Q. Have you had contacts with any other former or current employers of the Mississippi Medicaid Division about the operation or the running of the Mississippi Medicaid department?

A. No, I have not.

Q. Have you talked to your co-expert in this case, James Lowry?

A. No, I have not.

Q. Have you talked to Mr. Billy Simmons,

formerly an expert in this case?

A. No, I have not.

Q. Did you ask to see Mr. Pilgrim's deposition?

A. No, I have not specifically requested any of the depositions.

Q. Is it your opinion that you don't need to communicate with anyone that has or currently works at the Division of Medicaid in order to render your opinions in this case concerning the operation or management of the Mississippi Medicaid program?

A. There may be some desirability to talk to some of these individuals depending upon the level of detail that we may wish to put forward at trial in some of the areas that are the subject of the motion in limine. In terms of the general operation of the program and the level -- my current appreciation that we wish to present in terms of who was eligible for the program and what SAFs were covered and how did that change through time.

I feel that the formal documents provide that description at least to the level of detail that would be appropriate in describing the

program.

Q. So you don't think it's necessary, in those categories anyway, to discuss the operation of the Mississippi Medicaid program with anybody that's actually worked there or been involved?

A. For those subject -- for those subjects, you know, I feel comfortable with the formal descriptions.

Q. Could you delineate those subjects again?

A. The categories of persons who were covered?

Q. Eligibility.

A. Eligibility, the covered services, and the payment mechanisms.

Q. Those three?

A. Yes.

Q. You never worked, have you, at the Division of Medicaid in Mississippi?

A. That's correct.

Q. Have you done any consulting work for the Division of Medicaid in Mississippi?

A. I have not.

Q. Have you done any consulting work for any Medicaid Division?

A. No.

Q. Have you done, other than your work in this particular case, have you done any other systematic studies of Medicaid?

A. No systematic studies.

Q. Have you written papers on Medicaid?

A. Not that have dealt with Medicaid as an exclusive topic.

Q. Have you ever served as an expert witness with regard to Medicaid?

A. Only coincidentally as, for example, when a -- we would be involved in a case in which an injured person happened to be medically eligible.

Q. Have you ever testified as an expert witness as to the operation or management of a Medicaid division?

A. No.

Q. Have you ever set up or taken part in setting up a Medicaid management information system?

A. No.

Q. Have you ever prepared reports to the federal -- any federal agency or federal government in general concerning Medicaid?

A. No.

Q. Anything else other than the documents and the one transcript of Mr. Pilgrim that you have reviewed with regard to Mississippi Medicaid or Medicaid in general?

A. Other documents available from the Health Care Financing Administration dealing with comparisons across the 56 programs, the so-called yellow book publication from the Energy and Commerce Health Subcommittee on the subject of Medicaid. There's a brief discussion of Medicaid in the Ways and Means green book which is a similar kind of publication.

Q. I'm sorry. I didn't mean to interrupt you.

A. Again, there may be some others on that list. As you know there were four boxes of things.

Q. Do you consider yourself an expert on Mississippi's Medicaid Division?

A. I am not sure what you mean by Medicaid Division as opposed to Medicaid program.

Q. Medicaid Division in Mississippi, do you consider yourself an expert on the operation and management of the Mississippi Medicaid Division?

A. If by that we mean the internal workings of that governmental office, no, I do not consider myself an expert in their internal functioning.

Q. Do you consider yourself an expert in their output?

A. If you mean by their output the structure and functioning of the Medicaid program in Mississippi, I feel I have an expert knowledge of that program.

Q. Well, do you consider yourself an expert with regard to HCFA 64 reports?

A. In terms of understanding what that report sets forth and the information contained therein, yes, I understand the nature of those reports. As you previously asked, am I an expert in the completion of those reports and the gathering of the data for those reports, I would not be.

Q. So you would have no reason to challenge the data that went into making up the reports?

A. Except to the extent that I might find something that didn't foot or add up correctly. I would have no reason to think that the information

set forth was not a good faith effort to present accurate information.

Q. In fact, the government routinely relies upon the HCFA 64 and other reports produced by Medicaid, doesn't it?

A. From every state.

Q. As a health care economist quantifying costs, you generally look to reports of this nature?

A. That's correct.

Q. You generally rely on those reports, don't you?

A. Generally rely upon them, yes.

Q. When I say "these reports," I mean the HCFA 64. Is that right?

A. Right.

Q. The 2082s?

A. Yes, 2082s.

Q. Any other reports?

A. There may be periodic reports from time to time. Those are the routine reports that contain health care information.

Q. That you would rely upon?

A. For cost purposes, yes.

Q. I have done a cursory review of some of

the data collections that you have done. Did you attempt to do a -- We will get into them in more detail. I will have to attach them and get you to explain them. Did you attempt to do a comparison of Mississippi's Medicaid Division with other states' Medicaid divisions?

A. No.

Q. Do you know whether or not Mississippi's Medicaid Division and its operation and management is unique in and of itself to other state Medicaid divisions?

A. No, I don't.

Q. Do you plan to testify in any way with regard to the efficiency of the management and operation of the Mississippi Medicaid Division?

A. No, I have not been asked to do that.

Q. Do you plan to testify concerning fraud in the Medicaid system?

A. In the Medicaid system, I would expect to mention that in my description of the Medicaid system.

Q. What about in the Mississippi system in particular?

A. Only to the extent that that would be a component part of any state's Medicaid operations.

Q. Have you looked in particular with regard to Mississippi?

A. Only to the extent there are numbers reported in that category in the annual reports of the state.

Q. Does the federal government require the Division of Medicaid follow certain federal regulations and guidelines in its operation of its Medicaid program?

A. Yes.

Q. Have you done a systematic review to determine whether or not Mississippi has complied with those regulations and guidelines from its inception to 1996?

A. No, I have not.

Q. Do you think that might be important in providing your testimony?

A. I have operated on the presumption that any significant lack of compliance would have been noted in the review that HCFA conducts of various state programs.

Q. Could you find any such?

A. Absent such information, I have operated on the assumption that there was no, you know -- absent some minor deviations here or there,

general compliance.

Q. By Mississippi?

A. By Mississippi.

Q. So if you would have come across any kind of notable noncompliance in your review of these documents --

A. I would have expected to have had there been major noncompliance, I would have expected to have encountered that. I could have missed it.

Q. As we sit here today, Mississippi's Division of Medicaid has complied with the federal guidelines in the operation and management of its programs?

A. Yes. There could be instances where there could be lags which I never attempted to explain completely because differences in the Mississippi fiscal year and federal fiscal year and not having spent time to go out and find out precisely which things were supposed to change. Sometimes things change six months later than I thought they would. I have not pursued that.

Q. Generally they complied?

A. Generally they complied.

Q. Are you going to be talking about overpayments made by the Division of Medicaid in

Mississippi?

A. Not specific to the Division of Medicaid in Mississippi. In the general description of the Medicaid program, the fact that error can occur and that there errors need to be corrected and what happens when they recover overpayments.

Q. You want to decrease your health care costs by looking for the overpayments?

A. One would want to, you know, run a program that had a minimum amount of fraud and had a minimum amount of mistake.

Q. Within its budget constraints. Is that right?

A. You would want a program that had a minimum amount of overpayment and minimum amount of fraud.

Q. You could do a lot of things if you had unlimited resources, couldn't you, Dr. Long?

A. The economic judgment would be as long as one was recovering more than one was spending to recover it, you should be doing it.

Q. Don't certain of the ideas to decrease fraud, to decrease overpayment, certain programs to do that cost money, don't they, and require extra

employees, don't they?

A. Of course.

Q. So in terms you would want to know your budget constraints and work within your budget constraints?

A. The economic analysis would say that you would compare the cost of these programs to the savings they would generate. As long as the cost is less than the savings, you should pursue those programs.

Q. And who within a division of Medicaid would make this analysis?

A. I don't know who in specific. It would be the responsibility of the director of the division. I presume that some of that form of analysis would be delegated within the organization.

Q. Have you looked at Mississippi's budget constraints?

A. I know what was appropriated by the legislature each year.

Q. As an outside observer looking in on the Division of Medicaid, can you tell Helen Weatherby, the director, which extra fraud and abuse control she could afford to make or would

that be best left to her decision?

A. These kind of managerial judgments are always better by the person supervising them.

Q. By the director?

A. Or someone within that office, yes.

Q. Where would overpayments made by the Mississippi Medicaid Department if they were detected, where would they be reflected?

A. When they were recovered? There is a report that goes in to HCFA that lists recoveries.

Q. What's that report called, Doctor?

A. I don't recall the name of it. These have to be reported back to the federal government because you need to make an adjustment for the federal share and the portion of the recovery.

Q. You don't recall where that is reported?

A. I don't recall at this moment, that's right.

Q. What about third party recoveries, where is that reported?

A. In the same place.

Q. Do you recall where that is? What document that is?

A. The same document I just didn't

remember.

Q. Have you reviewed those documents for the State of Mississippi?

A. I have not personally reviewed all those documents.

Q. If you're testifying about fraud, overpayment, third party recoveries, cost containments, things of that nature, wouldn't you want to look at those types of reports to see what happened within Mississippi?

A. As I previously testified, you know, I expect to testify as to those elements as part of the general description of a Medicaid program, any Medicaid program.

Q. You don't know specifically how that is processed in the Division of Medicaid in Mississippi, do you?

A. Only to the extent that it has been reported.

Q. Where?

A. For example, in the annual reports, there is in many of the annual reports, there are specific entries that indicate the amount of recovery from the fraud and abuse program.

Q. Do you know whether or not the

Mississippi Medicaid program made adjustments in their expenditures, stated expenditures as a result of those recoveries?

A. On the assumption they have complied with the existing laws and regulations from the federal government, I would assume they were properly reported.

Q. But you don't know what form that is reported on?

A. Right now I don't remember which line on which form it is.

Q. I want you to assume for me, Dr. Long, that smokers cost more in a given year than nonsmokers all things being equal. All right?

A. Okay.

Q. Would the relative cost be the same between smokers and nonsmokers despite fraud and abuse, mismanagement to a health plan or to the Medicaid plan?

A. It would depend on whether or not the smoker and the nonsmoker provided differential opportunities to providers to commit fraud, for example or whether the nature of services provided were more prone to error in calculation or the administrative process. Since we are providing

different services costing different amounts of money, we may be involved with different providers and different payment mechanisms. There could be differential fraud and abuse or mistake.

Q. Your position is it could be the smoker or the nonsmoker perpetrating the fraud on the system?

A. The fraud is perpetrated by providers of services. We are talking about different providers and different services. There could be different propensities.

Q. You are looking at provider fraud to either the smoker or the nonsmoker?

A. If we were talking about different providers providing different services.

Q. I see. Have Medicaid costs been rising among all states over the last 25 years?

A. Yes.

Q. Is Mississippi unique in its growth compared to the other states?

A. Unique in the sense that its growth is not exactly the same as anybody else. Its growth has gone up as has the expenses in other states.

Q. Well, does it have a statistically significant difference in growth compared to the

other states?

A. Compared to the overall average of all other states, I do not believe it is significantly different from the mean. There are a couple of instances where we will see some differences in Medicaid costs viewed on a per capita basis in Mississippi from the average of all states, but as far as a general upper trend, it's like the overall program.

Q. It's fair to say then, Dr. Long, generally Mississippi's growth and Medicaid expenditures is similar than that of the other states?

A. Yes.

Q. Do you have your disclosure statement in front of you?

A. Yes.

Q. You have one?

A. Yes.

Q. Okay. You said generally the growth and expenditures was the same for Mississippi and the other states?

A. Similar, yes.

Q. Tell me the distinguishing factors, if you can, between where you say the manner in which

the program varies between the states in paragraph one. I am assuming you mean the Mississippi program varies between the states?

A. Well, I mean here the fact that we have a federal enabling statute that has, in fact, produced 56 distinct Medicaid programs. The Medicaid programs are different in all states and territories and the District of Columbia.

Q. I think I understand this. The federal government establishes a bottom threshold of who you must cover and what services you have got to provide. Is that basically correct?

A. And also some top thresholds in terms of activities for which the federal government will not chip in money.

Q. Okay. Do you know whether or not Mississippi, the Division of Medicaid in Mississippi, has been conservative in its acceptance of covered eligibles? Conservative meaning not allowing opening the doors for more excessive numbers of Medicaid eligibles versus other states?

A. At its inception in 1970, the Mississippi Medicaid program came in above the bare minimum, but not at the most generous levels that

were allowed under the federal statute.

Q. Would you say in the middle?

A. Probably slightly below the middle.

Q. So we would be on the conservative side of eligibles in 1970?

A. Right. That position has become slightly more centrist subsequently, but not, again, at the upper reaches of what would be possible which a few states have done.

Q. Here we sit in 1996, '97. Are we still conservative compared to the other states?

A. In eligibility, I would say it's probably not relatively less conservative than it was in 1970, but still on the conservative side of median.

Q. When we are talking about conservative, meaning we don't have as many Medicaid eligibles on our roles, right?

A. We are not talking about absolute numbers. We are talking about the categories of persons that are eligible for the program.

Q. Okay. Do you know how these categories rank among the southeast states?

A. No. At this moment, I couldn't give you a comparison with subsets of statements. We

have all that data. I didn't look at it on a regional basis.

Q. What would you consider the southeast states? Texas to Florida and up to Tennessee or what?

A. It could be --

MR. HELMS:

You include Texas in southeast?

MR. YOUNG:

Sometimes it is.

MR. HELMS:

If you understand the question, answer it. I can't figure it out.

BY MR. YOUNG:

Q. If he has a different definition of southeast.

A. I would be happy to include in southeast whatever states you like.

MR. HELMS:

I didn't mean to get off on this.

MR. YOUNG:

You will be wanting to get in the SEC before long anyway.

BY MR. YOUNG:

Q. What is your understanding if you were

doing a comparison by region, what you would term in looking at Medicaid divisions, what would you term the southeast states?

A. I would use things generally east of the Mississippi, although I might include Louisiana.

Q. South of?

A. Probably for Medicaid purposes currently I would exclude Tennessee because of its special Medicaid program which would make it difficult to make direct comparisons in any event. I would probably go across and maybe include the Carolinas south.

Q. You made a distinguishing remark when we were talking about between eligibility, conservative as far as eligibility, but you said we are not talking about the number of enrollees.

A. I said that.

Q. Tell me why you made that distinction.

A. I believe you asked me do we have fewer enrollees in Mississippi. That might be true, but that doesn't have anything to do with the categories. It has to do with Mississippi having a smaller population.

Q. Or a poorer population?

A. Well, then you are talking about proportions. If you want to say how many people are absolutely enrolled in Mississippi compared to California or New York, New York would have a far more conservative eligibility program than Mississippi and still have a lot more people because there's a lot more people in New York. I was distinguishing between population and categories.

Q. As far as the category of eligibles, Mississippi still tends to be conservative?

A. Yes. Yes.

Q. What about as far as services go?

A. Very much middle of the road; not conservative, not wildly liberal either. Pretty consistently through time has offered a package of services which is pretty consistent with the middle of the road range among states.

Q. I believe your testimony was earlier that you had done no systematic review or study of the Mississippi Medicaid Division to determine whether or not there's more fraud, more abuse, more overpayments in the Mississippi Medicaid Division than in other states?

A. That's correct. I have not done a

systematic review.

Q. You're basing that portion of your testimony on national reports of which Mississippi would be included. Is that correct?

A. I'm sorry. Rephrase it.

Q. You're drawing conclusions about the fraud, the overpayments, the abuse, the waste on Mississippi from national reports on Medicaid in general. Is that correct?

A. Well, in this area of the testimony, I wouldn't characterize it as drawing conclusions. Here I am merely describing, A, Medicaid program, and, B, how the Medicaid program varies among states, and, I guess, C, where Mississippi fits in that spectrum across several dimensions.

Q. Are you planning on talking about fraud, abuse, waste, mismanagement in Medicaid in general?

A. The fact that these are concerns of the program at a national level and that the federal government encourages states to attempt to minimize the extent to which these adverse factors increase the cost of the program.

Q. Where does that -- tell me on your disclosure statement where that fits in, which

Q. Have you looked at Mississippi in particular?

MR. HELMS:

Objection. Asked and answered. I don't know how many times he has to tell you. Go ahead, if you can, and answer it.

THE WITNESS:

I have looked at Mississippi. I know what Mississippi has reported in recoveries.

BY MR. YOUNG:

Q. Where does that reported recovery appear?

A. One of the places it occurs is in the annual reports of the Division of Medicaid.

Q. Are you going to do a comparison of the fraud, abuse, waste, mismanagement, Mississippi to other states?

A. I have no plans to do that.

Q. Do you know how Mississippi ranks in these categories with other states?

A. I don't know as we sit here today.

Q. Paragraph 2 of your disclosure states you say the reasons that Medicaid costs have been rising since the Mississippi Medicaid program's inception and the reasons that smoking does not

explain those rising costs.

Does in your opinion smoking explain any costs to the Medicaid program, Dr. Long?

A. Smoking may be associated with some of the costs of the Medicaid program. The question here has to do with the -- as we talked about a few moment ago -- the increases in the costs during the period under consideration.

Q. You said smoking may be associated with some of those costs. What do you base that on?

A. The very same things we talked about several times already.

Q. Tell me again.

A. Which are --

Q. I want to know in particular with regard to the Division of Medicaid in Mississippi, what you base your statement on that smoking may explain some of those costs.

A. We are talking about the Medicaid program costs, not the costs of running the division.

Q. Are you talking about administrative costs?

A. I am asking what you are talking about.

Q. Terms of health care expenditures?

A. Some of the health care expenditures in the Mississippi Medicaid program are probably associated with smoking. The question is what are the increases in costs associated with. That's what number two is dealing with.

Q. Well, my question to you is you said some of those health care expenditure costs are probably associated with smoking?

A. Yes.

Q. Didn't you say that?

A. You asked that question, and I said yes.

Q. Okay. What do you base that statement on?

A. Again, the kind of associations that we have discussed several times that show that there are disease processes that have a positive incident related to smoking history, that require medical intervention, and to the extent those happen in Medicaid eligible persons, they become recipients of care and that care costs money.

Q. Do you have any reason to believe that the statement you just made is not occurring with regard to the Division of Medicaid in Mississippi?

A. Is not occurring? I have no reason to believe it's not occurring.

Q. Do you believe that smoking is responsible for certain of the health care expenditures on Medicaid?

MR. HELMS:

Objection to the form. "Responsible." Calling for a legal conclusion, and it's vague.

BY MR. YOUNG:

Q. You can answer.

A. I believe that there are expenditures made by the Mississippi Medicaid program that are strongly associated with health conditions related to smoking by the Medicaid eligible person.

Q. Would you make that same statement for the State of Mississippi's health insurance program?

A. I don't know anything about the State of Mississippi's health insurance program. If it covers persons who were smokers, it's likely it would be the same conclusion.

Q. What about with regard to charity care of an indigent at a hospital in Mississippi?

A. Again, to the extent that it covered or provided care to persons who were smokers, that's

quite likely.

Q. As a health care economist, Dr. Long, can you quantify these costs that you just described to the Medicaid program?

A. Is your question can I personally, or can it be done?

Q. Can it be done?

A. In theory it could be done.

Q. In what way?

A. One could -- one would -- one way would be to obtain the medical records and claims for each episode of care for each individual who has received care within the Medicaid program since 1970 identifying those ICD-9 codes associated with the Surgeon General's Report, and look at the actual cost person by person.

Q. Okay. Well, what if you had 100 or 10 lung cancers, how would you determine which ones were for smoking?

A. Certainly as a first step one might want to ask which ones were smokers.

Q. Okay. What if you didn't have that data, how would you make a reasonable estimate?

A. Well, the first point is then it would become an estimate, not a determination.

Q. You mean to the penny determination? These are all estimates, after all, is what we are talking about?

A. If I have historical records, you will tell me exactly how much money you disbursed.

Q. If I don't have the data you just described, how would I make an estimate?

A. In that particular -- in the case of lung cancer, one would then, I presume, go to an epidemiologist and look for longitudinal studies, historical studies covering the period for which the costs were incurred, and see what the prevalence of smoking was among persons who were diagnosed with lung cancer in 1973.

Q. Then just apply the mortality ratio times the expenditure?

A. For the target population in that period of time.

Q. That's scientifically sound from a health care economist standpoint?

A. If one has a statistical basis, sufficient sample size, ten wouldn't obviously be enough.

Q. Right. Twenty wouldn't tell you anything either?

A. Twenty wouldn't be enough.

Q. From a statistical standpoint --

A. You need more.

Q. From a statistical standpoint, 20 individuals out of a population of say 500,000 tells you absolutely nothing?

A. It would not allow me to say that I would have any level of confidence in the estimate that you produced.

Q. What about 45 out of 500,000?

A. As soon as we start getting into numbers in excess of 50, then we begin to generate some level of confidence.

Q. The higher you go, the more confidence?

A. The more cases, the more confident.

Q. Under 50?

A. You would be very nervous about drawing conclusions from that small a sample size.

Q. We just described taking the dollar amount spent for certain diseases and applying the epidemiological ratio of that disease to the general population.

A. Assuming that we have the academic medical studies that show a causative relationship between smoking and lung cancer.

Q. Can we call that like a mortality ratio approach? What would you call it?

A. What we are looking at here is not did they die or not, but how much money did we spend.

Q. Just getting a thumbnail on it, approximation or estimate?

A. If in 1973 the Mississippi Medicaid program provided medical care services for "N" cases that were diagnosed as lung cancer whether they died or didn't die in 1973, if we knew what the costs were and we knew --

Q. By adding up the ICD-9 codes?

A. No. We added costs by looking at the claim forms. We would know the diagnosis by looking at ICD-9s.

Q. I got you.

A. If we could then with a reasonable degree of statistical confidence say that "X" percent of all lung cancer diagnoses are of persons who have smoked two packs a day of cigarettes for twenty years or longer, and then would have some basis for saying this fraction of the treatment cost for the diagnosis of lung cancer in 1973 could be associated with that behavior.

Q. Cigarette smoking?

A. Right.

Q. That sounds pretty basic to me.

What would be another way that you would do it or could do it, I guess?

A. I'm sure there are dozens of ways one could do it.

Q. Tell me some.

A. I don't know all of them. That's not my field.

Q. I understand.

A. As one gets farther and farther away from real data, you know, here are the medical records, here are the ICD-9 codes and claim forms that match up with these. Here's the amount of money involved, and here's what we know about smoking prevalence in some subpopulation in that period of time. As one moves farther and farther away from reality, one looks for surrogates, substitutes, approximations.

Q. I guess, for instance, if you don't have the smoking data on the population at issue, you would look for a surrogate for that. Is that correct?

A. Yes. That's where we segue into the whole concept of modeling.

Q. That's done? Modelers such as yourself or health care economists extrapolate data when they don't have data all the time, don't they?

A. Yes. You look for, you know, a real world situation that is as close as you can come to the one that you want to, you know, draw conclusions about. If you can find out something that is true about your study population and verify it and cross check it and replicate it, then you have at least got a shot at applying to some other population.

Q. In fact, there's a lot of times you have to do that because you don't have the data on a certain population you're looking at. Isn't that right?

A. There's a lot of times you don't have the data and this may be your last resort methodology. Sometimes it works, sometimes it doesn't.

Q. That method or general method that you just described is scientifically a valid method to do?

MR. HELMS:

Objection to the phrase, "that method." I'm not sure which method.

BY MR. YOUNG:

Q. Extrapolating data from one population to another that you don't have data on, if you take into account the things you talked about, that's a valid process?

A. The process is certainly a -- I'm searching for a word. Valid means true. It is certainly an acceptable -- both respectable and acceptable process. Sometimes that process yields usable results and sometimes it doesn't. That doesn't mean the process is bad or there's something wrong with the methodology per se. Sometimes the world is so complex that you just can't build a model that works.

Q. I see what you're saying.

A. That doesn't mean you shouldn't try.

Q. Right. When you say a model that works, are you talking about something that is -- you sound like you're talking about within confidence intervals?

A. Yes.

Q. Like 95 percent confidence intervals, is that right?

A. Whatever your ballpark precision that you want. You can do it at 90 percent, 95 percent,

98 percent.

Q. How far down can you go?

A. It's mathematics. It's a continuum. What level of confidence is sufficient for the kind of decision or analysis that you wish to make.

Q. Let me ask you this then. For instance, does it help one then to look at a situation from different viewpoints in order to determine whether or not one way is -- the results you're getting from various methods to determine whether or not one method is reliable?

A. It certainly doesn't hurt to have alternative models, alternative approaches. It does not necessarily follow, however, that if two quite different models give you the same result that you have got a correct result.

Q. I understand.

How else could we quantify this concept?

A. The only other thing that leaps to mind at the moment is that one could begin a contemporaneous study, and observing the fact that historically nobody kept the data or nobody collected the data or nobody thought about the data, but sure would like to have the data from

this point forward is to build an information system that captures the data here and now and carries it forward.

Q. Have you asked your client, and when I say "your client," have you asked Philip Morris if you could see any of its documents, ask if they ever quantified health care expenditures?

MR. HELMS:

I don't know why you continue to do that. You know he testified his client is not Philip Morris. He testified he was retained by Arnold & Porter.

If you don't like the testimony, I'm sorry. You're trying to change it. You know what he said. You heard him. It's a game.

BY MR. YOUNG:

Q. Your client is the law firm, Dr. Long. Have you asked the law firm to ask Philip Morris? Is the law firm a defendant in this case? Do you know?

A. I know they are not a defendant.

Q. Who is the defendant in this case?

A. One of the defendants is Philip Morris. The defendants generally are tobacco manufacturers and wholesalers operating in the

State of Mississippi.

Q. Have you asked the law firm to ask Philip Morris or any other of the tobacco companies for any internal documents where they quantified health care costs?

A. No.

Q. Would you like to see those in order to see whether or not -- you talked about methods and things of that nature, whether or not the tobacco companies have actually quantified health care costs?

A. I think it would be exceptionally interesting from an academic point of view. For the purposes of the lawsuit, what I have been asked to do is look at the models that other people are putting forward.

Q. Has the law firm -- Let me ask you this. In the personal injuries cases that you have testified concerning damages, and you have done that before, haven't you?

A. I have.

Q. Do you ever get into a debate with your opposing side as to the amount of damages in a case?

A. Well, I wouldn't characterize it as a

debate. There's difference of opinion.

Q. On the amount of damages?

A. On the amount of damages.

Q. Well, you have come up with the way in those cases? You came up with the way in which you calculate damages?

A. Yes.

Q. Okay. In this case, have you calculated or attempted to calculate the amount of damages for your law firm, your client, the law firm, whose client is the tobacco industry?

A. No.

Q. Have you been asked to do that?

A. No.

Q. Did you find that strange?

A. No.

Q. Could you do that for them if they asked you to?

A. To do that entire job would be beyond my personal expertise. I could certainly manage a process that involved numerous other experts.

Q. We could come up with a number?

A. And we could see what kind of model we could build.

Q. Could you come up with a number that

you --

A. I don't know whether I could come up with a number that I would be willing to testify to.

Q. But you think?

A. I have no idea I could come up with a number. Would I feel in good conscience I could get on a stand and testify that I really believe this is a good estimate would depend on the results of the model that we chose to explore.

Q. So your client hasn't asked you to do that?

A. My client hasn't asked me to do that.

Q. Would you like to do that?

A. Not particularly.

Q. How come?

A. I am very busy right now, and have limited capacity. If I were not doing anything else and had the resources to retain the expertise that would be needed in addition to my own, then it would be an interesting project.

Q. Cynthia raised her hand. She wants to do it.

Listen, you just said something -- you would want to retain the expertise necessary in

addition to yourself to do this project. Who would you assemble? I don't mean names of people. I mean types of people.

A. I would clearly want many of the areas of expertise that we have identified today such as epidemiologists, such as persons skilled in interviewing and conducting surveys, certainly statisticians, econometricians.

Q. Health care economists such as yourself?

A. Some redundancy in that area would be all right.

Q. Would you like an oversight panel?

A. If I was looking for -- the answer is yes, I would.

Q. Do you know Jeff Harris?

A. No, I don't.

Q. Do you know Will Manning?

A. No, I don't.

Q. Ken Warner?

A. No.

Q. Okay. Dorothy Rice by any chance?

A. I have heard the name. I do not know Dorothy Rice.

Q. I don't know how much longer you want

to go today. Tomorrow we will have to go through some things to identify what these things are. You will probably be able to do it pretty quick.

A. I am willing to continue at this point. It would be nice to get a break in. I would like to make a phone call.

(A break was taken.)

BY MR. YOUNG:

Q. Paragraph 2, again, of your disclosure statement. Before we got off on the tangent about smoking -- I don't know why we were talking about -- in your disclosure statement in that paragraph, you said Medicaid costs have been rising since the Mississippi Medicaid program's inception. Is that correct?

A. That's correct.

Q. Other states' Medicaid costs have been rising since their inception, too, isn't that correct?

A. Correct.

Q. Is this category where we discussed earlier that Mississippi generally would be about the same as other states in terms of the rate of their increase in Medicaid costs?

A. General increase would be similar to

other states.

Q. When we are talking about costs in this particular case or in your particular setting, you're including both administrative and expenditure costs. Is that correct?

A. We are talking about total program costs.

Q. Would be administrative costs?

A. Would include administrative costs.

Q. Tell me what program, the categories of total program cost.

A. In broadest terms, administrative costs and costs of services for most of the years.

Q. Cost of services meaning health care expenditures?

A. Right. And then other categories that are in some sense none of the above like Medicare buy-in, like DISH.

Q. Okay. Do you know if this lawsuit is seeking to recoup any portion of administrative costs?

A. No, I don't.

Q. Would that be relevant to your opinions one way or the other?

A. With respect to number two?

Q. Yes.
A. No.
Q. Do you know if administrative costs are at issue in this case at all?
A. No.
Q. So taking administrative costs, for instance, out of your equation, just looking at purely health care expenditures, is your testimony the same in other words with regard to just to Medicaid or health care expenditures?
A. Some of the factors that cause the health care expenditure costs to rise almost always cause administrative costs to rise.
Q. Okay. Let's go to Paragraph 3. It reads, "The many voluntary choices made by the State of Mississippi that caused it to incur Medicaid costs."
Is that, again, back in the area of between the floor and the ceiling in terms of eligibility criteria and services provided?
A. It includes that, yes.
Q. What else does it include?
A. It includes the choice to have the Medicaid program at all.
Q. Okay. So in your opinion that is a

choice of the state?

A. Yes.

Q. How many states don't have -- Is that a wrong choice?

A. No.

Q. You're just saying that the State of Mississippi experiences costs because it chose to have a Medicaid program?

A. In part, yes.

Q. How many states don't have a Medicaid program?

A. Today none.

Q. How would the indigent health care -- Medicaid is for indigent health care, isn't it?

A. For some indigent health care.

Q. How would that health care have been handled had Mississippi not had a Medicaid program?

A. Some health care would have been provided as it was historically and some is currently based on the charitable inclinations of providers of care.

Q. Meaning Charity Hospitals?

A. Could have been Charity Hospitals. Could have been physicians giving care and not

A. You would have some costs born by the State of Mississippi; some costs born by the private sector. You would probably have some people who would not have the access to care that they have today.

Q. We could have people dying in the streets?

A. Not necessarily with the consequence of mortality. With the consequence of morbidity.

Q. We could have diseased people in the streets is what you're saying?

A. You could have people that were not at the level of health status that they are today.

Q. Well, why don't states if it's going to cost them less -- is it your position that it costs you less not to have a Medicaid program?

A. The testimony here is that the decision to have a Medicaid program puts certain economic costs inside of a box called Medicaid.

Q. Okay. Do you know what the State of Mississippi's constitution says about caring for the sick and indigent?

A. No, I don't.

Q. You certainly don't propose not caring for the sick and indigent, do you, Doctor?

A. No, I don't.

Q. What are the other choices that we didn't cover aside from deciding to have a Medicaid program that resulted in Medicaid costs?

A. We already mentioned the choices regarding eligibility and covered services. There are also choices that can be made with respect to rates of payment to providers of services. Also choices with respect to the overall nature of the system. Some states, for example, have chosen to seek waivers under the federal statute and institute managed care programs. Mississippi has not at this point made that choice.

Q. They haven't?

A. They have not sought a waiver for a statewide HMO, that's correct.

Q. A statewide HMO?

A. That's right.

Q. Do you know if they have done limited HMOs?

A. I don't know.

Q. Would that be important before you make the conclusionary statement?

A. My statement was they had not sought a waiver for a statewide HMO.

Q. The basis of your testimony or the point of your testimony, my understanding is that they should have put in an HMO in order to help with costs?

A. No.

MR. HELMS:

I object to that as not being a question.

BY MR. YOUNG:

Q. Correct me if I mischaracterized that, please.

A. Number two is addressing the array the choices that are available, have been, and are available to states.

Q. Let's cover that again. Rates of payment, one?

A. Right.

Q. HMOs, is that two?

A. Waiver options. Waiving the freedom of choice so that one can have a statewide managed care program like Arizona or Tennessee.

Q. Is that HMO?

A. That's one mechanism for HMO, yes.

Q. All right.

A. Eligibility, covered services, chosing

to have a Medicaid program of the traditional type.

Q. That's what we have, isn't it? Right?

A. Yes.

Q. We have the traditional Medicaid program?

A. Yes.

Q. How many have a nontraditional Medicaid program, how many states?

A. About 12 right now.

Q. We talked already about eligibility and covered services. With regard to HMO statewide waiver, how does a state Medicaid program determine whether or not an HMO is feasible for that program? Do you know?

A. I don't know the mechanics of how particular states may have chosen to analyze that question.

Q. Are you saying we could have taken advantage of this and had the statewide waiver and allowed HMOs into the Medicaid program?

A. Mississippi could have applied for a statewide waiver such as Tennessee, for example.

Q. Because it didn't, it's experiencing increased costs, is that your testimony?

A. It might be incurring additional costs

it would not occur if it were in a managed care mode.

Q. Either it is or it isn't. Do you know, Doctor?

A. I don't know.

Q. You don't know whether or not putting in HMOs would have saved the state any money at all?

A. I know that when we look at the per capita costs in Tennessee, for example, post-HMO versus pre-HMO, that the rate of increase has been slow.

Q. So you're saying that the State of Mississippi should put in HMOs. Is that what you're saying?

A. That's the choice the state should explore.

Q. Do you know whether they have explored it?

A. No, I don't.

Q. Have you asked anyone at the State of Mississippi's Medicaid Division --

A. No, I haven't.

Q. -- whether they explored it?

A. No, I haven't.

Q. Have you looked at any documents regarding whether or not they explored the implementation of HMOs?

A. I have not.

Q. Is the decision to implement HMOs better left to the immediate director of the Medicaid program?

A. All these decision are made, if not by the director, state legislature.

Q. They would be in a better position to determine whether or not HMOs are feasible for their program, wouldn't they?

A. My testimony is not to say that an HMO is feasible or not feasible. My testimony is to say that this is an option available to every state. It's a choice which each state can make, and the states which have made the choice, we can see certain things about them.

Q. You're saying the State of Mississippi should have made that choice. Didn't you say that already?

A. No, I didn't say that already.

Q. I believe your earlier testimony that the State of Mississippi in your opinion should implement HMOs?

A. I did not intend to say that. We could read back the transcript.

Q. You don't have an opinion whether or not they should implement HMOs?

A. I have an opinion there is the potential for cost savings with managed care.

Q. Have you looked at any studies regarding the outcomes of Medicaid programs or other programs that have implemented HMOs when they weren't ready to do it?

A. I don't know of any that weren't ready to do it.

Q. Have you looked at any studies regarding the outcomes of insurance programs or Medicaid divisions that have implemented HMOs when they weren't ready to handle HMOs?

A. I have seen no such studies.

Q. My question, again, is the director of Medicaid in a better position to determine whether or not HMOs are feasible in their system than you?

A. I do not know about the qualifications or expertise of a particular director of Medicaid, but certainly additional information would need to be gathered by the state to explore the feasibility.

Q. You don't know whether Mississippi has explored that feasibility, do you?

A. I don't know.

Q. Or the conclusions of any such feasibility study?

A. I do not.

Q. Do you know if they are participating in a limited basis in HMOs?

A. I do not know.

Q. We talked about the rates of payment. Is that rate setting? Not in terms of the insurance way we discussed earlier.

A. It could be rate setting or it could be methodology.

Q. Is Mississippi doing it wrong in your opinion?

A. No. I am just saying Mississippi has choices to make with respect to payment methodologies and payment rates.

Q. You reviewed the methodology and rates, haven't you?

A. Yes.

Q. Have you done a cross comparison between Mississippi and other states?

A. In terms of methodologies, I have not.

Q. How about in terms of -- have you done any comparison?

A. In terms of aggregate costs and limits per -- per recipient, we have some comparisons.

Q. How does Mississippi rank in those comparisons?

A. Basically in about the middle.

Q. From what I can gather so far that we covered with regard to your review of the Mississippi Medicaid program, one, it's met federal regulation and guidelines to the best of your knowledge. Is that correct?

A. As far as the things that I have seen show consistence with eligibility and coverage parameters.

Q. Did you tell me earlier that Mississippi's Medicaid Division to the best of your knowledge after reviewing the annual reports and other documents related to this Division of Medicaid, that to your knowledge it met the federal regulations and guidelines?

A. In these areas, yes.

Q. Do you know if it's not met in any other areas?

A. I did not know in other areas.

Q. We also discussed, I think, a general synopsis Mississippi's Medicaid program on average is average compared to the other states. Isn't that true?

A. Yes.

Q. In terms of eligibility, in terms of criteria, in terms of fraud. Isn't that correct?

A. I don't know their average in terms of fraud.

Q. Your testimony is limited to just eligibility and criteria?

A. Yes.

Q. In terms of rate payments, methods of rate payment or payments made to providers, they are average. Isn't that right?

A. In terms of methodologies they -- That's not a linear continuum. You can't calculate an average. They engage in methodologies that are still used by other states.

Q. The only thing that you really could say that Mississippi was not average in was that it hasn't done a statewide waiver or HMOs?

A. That wouldn't be an average statement either.

Q. Tell me how it differed from the rest,

or from the states that didn't implement the statewide waiver program?

A. There are approximately 12 waiver states currently, and Mississippi is not one of them.

Q. Only 12 out of all the states that have Medicaid programs have the statewide waiver program?

A. Currently in effect.

Q. Actually Mississippi is in the majority of the states with regard to the statewide waiver program. Isn't it?

A. At this time.

Q. Any other voluntary choices we haven't covered that you intend to testify about?

A. In terms of -- again, we are on the fringe here with the in limine motion, but again, with respect to --

Q. Before you go into it, give me the general topic.

A. DISH.

MR. HELMS:

Actually, in your answer, I don't want you to be concerned with the motion in limine. We are not in trial or in front of a judge or jury.

If he asks a question that covers it, give him the answer. Don't be concerned about doing that. Just answer his questions.

BY MR. YOUNG:

Q. DISH may be one?

A. The choices made by the state, special payment mechanism for DISH and the funding of indigent care would be another choice made.

Q. Now, the biggie, Paragraph 4. Can you review that for me real quick? Run through it to familiarize yourself with it.

A. Okay.

Q. Let me ask you this. Did you write this disclosure statement?

A. No.

Q. Who wrote this?

A. Counsel wrote that. I reviewed it, made some changes to it.

Q. Which counsel?

A. I'm not certain who actually was the author.

Q. Who did you receive it from?

A. Received it from Mr. Streeter.

Q. What changes did you make?

A. Some wordsmithing, moving things

around, putting adjectives in different places.

Q. Well, do you recall --

A. I don't recall what the changes were at this time.

Q. In any of the paragraphs?

A. Correct.

Q. Were there any substantive changes?

A. No. We didn't suggest the deletion or addition of anything.

Q. First of all, are you going to discuss SAMMEC? And you know that's S-A-M-M-E-C, Smoking Attributable Morbidity Mortality Economic Costs. Are you going to discuss SAMMEC in any way?

A. Yes.

Q. Are you going to talk about -- What is SAMMEC?

A. It's a model for estimating costs that basically keyed on estimates of excess morbidity associated with conditions that are on the surgeon general's list.

Q. You would call it a model?

A. Yes.

Q. What type of model is it?

A. Again, it's an econometric model to put it in a category, I guess.

Q. Which version of SAMMEC -- You're aware there are versions of SAMMEC, aren't you?

A. Yes.

Q. Which version do you intend to talk about?

A. The discussion related to SAMMEC would be related to the Max report and whatever its final form is.

Q. What version?

A. Which I apparently have not received yet.

Q. Do you know what version of SAMMEC was used in the report you received?

A. Let me see if she cites the specific version.

2.1 is the one cited in the report I have.

Q. That's the one you will offer testimony, assuming she doesn't change to another version?

A. Right. Then it would be this, you know, her use of that in this report.

Q. What have you done to familiarize yourself with SAMMEC Version 2.1?

A. In terms of the specific mechanisms of

the model itself, I have not attempted to familiarize myself with the mechanics or the equations of the model.

Q. So will your testimony be more as to the input to the model?

A. The nature of the input to the model and its applicability to the population to which it is applied.

Q. Where does SAMMEC come from, 2.1?

A. My recollection this was a model which was developed in cooperation with the University of California at Berkeley and the Centers for Disease Control and Prevention.

Q. So you won't express opinions as to the validity or reliability as to the model itself, the equations or mechanisms contained within SAMMEC?

A. I wouldn't anticipate, and I haven't been asked to get into the technical details of the model.

Q. So I just want to make sure we're on the same page. Your testimony will be limited solely to the input that's put in to the SAMMEC model. Is that correct?

A. My understanding is that I will be asked to talk about the data, the national data

that was used in the development of the model and the ways in which -- the characteristics those populations are distinct from the Mississippi Medicaid population.

Q. That's getting into the mechanics and workings of the model, is it not?

A. Not in the sense of the structure and construction of the equations.

Q. Well, they have to be --

A. That's what I would understand to be the workings of the model.

Q. What did you just identify for me as what you're not considering the workings of the model?

A. The distinctions between the national population on which the model construction was based and the population to which the model was being applied.

Q. Any other aspects of SAMMEC that you're going to talk about?

A. Generically raising the question of its applicability through time. Its consistency.

Q. Where did you obtain your copy of SAMMEC 2.1?

A. I don't have a copy of SAMMEC 2.1.

Q. Did you run it?
A. No, I didn't.
Q. You have not actually run the numbers?
A. No.
Q. Has any consultant working for you or the law firms or the tobacco industry to your knowledge ran the numbers for SAMMEC?
A. I can only answer with respect to myself. No one working for me has run SAMMEC.
Q. Have you reviewed any material of someone who's run SAMMEC?
A. Not at this time.
Q. Okay. Do you know where to get the SAMMEC model if you wanted to get it?
A. I suspect I could ask counsel for a copy. I guess it would be available from any of the sources that have written about it and described it.
Q. Have you reviewed all the literature on SAMMEC 2.1?
A. I have not reviewed all the literature.
Q. Have you reviewed any literature regarding SAMMEC?
A. Some literature was provided by counsel

which I perused but have not studied.

Q. How do you know the national population on which the SAMMEC model is based? On what national population is the SAMMEC model based?

A. The model was built based on a population other than the Mississippi Medicaid population.

Q. What population?

A. I don't know the precise population at this point.

Q. You don't know what population forms the basis of the SAMMEC model?

A. I believe that's my response.

Q. But you're willing to testify today that it's inapplicable to Mississippi?

A. I have been asked to as necessary look at the -- at characteristics of that model if it is used and identify the distinctions between that population and the Mississippi Medicaid population.

Q. Well, what are the characteristics of that model?

A. Of the model?

Q. Of the population that forms the basis of the SAMMEC model?

A. I don't have that data at this time.

Q. How have you done the comparisons?

A. I haven't done the comparison at this time.

Q. Do you plan to do that comparison?

A. When I receive that information I would do that comparison.

Q. Who would that information come from?

A. I would expect to receive that from counsel.

Q. Well, you correct me if I'm wrong. SAMMEC is a model that you can buy off the computer store shelf. Do you know that?

A. I know that. It's a Lotus based model.

Q. The model is there. Isn't that right?

A. The model exists, yes.

Q. The model is formed, the characteristics of the model are already there. Isn't that right?

A. Right.

Q. What are the characteristics of the SAMMEC model that you will draw a distinction between SAMMEC and the Mississippi population?

A. The SAMMEC model characteristics were derived from raw data. The population characteristics of that raw data, I did not have.

If I receive those characteristics, I would then make a comparison between those and the Mississippi Medicaid population.

Q. You are here giving opinions, and you obviously formulated your opinions, Doctor. One is that you can't use the SAMMEC model to generate costs for the Mississippi population?

A. That's not my opinion.

Q. You're saying the characteristics in the SAMMEC model, you said the characteristics are built in to the model?

A. Any model reflects data which was used to construct it.

Q. Now, what were the data used to construct the SAMMEC model?

A. I don't know that at this point.

Q. Who would know that?

A. That information is undoubtedly contained in the literature regarding SAMMEC.

Q. You have not looked at it?

A. I have not studied that literature at this time.

Q. As we sit here today, you cannot draw the distinctions between the characteristics built into the SAMMEC model and the Mississippi

population at issue in this case, can you?

A. I have not done that analysis as of today.

Q. You can't express any opinions about that today, can you?

A. I have not had the data to do that, that's correct.

Q. Have you asked for the data?

A. We have been working primarily on the NEMIS data set.

Q. Have you reviewed the literature that you produced to me on SAMMEC to see whether these characteristics that we have been discussing are present in that literature?

A. We received substantial quantities of documents, some of which were perused a year or so ago. I have not gone through that literature recently. I have never read it in its entirety.

Q. You don't know whether or not the characteristics are contained within those documents, do you?

A. I do not.

Q. They may very well be?

A. They could be.

Q. You may already have the information,

couldn't you?

A. It's possible.

Q. Do you consider yourself an expert on SAMMEC, Doctor?

A. No, sir.

Q. Do you consider yourself an expert on the methodology employed by SAMMEC?

A. No, sir.

Q. Do you consider yourself an expert on the characteristics of the SAMMEC model?

A. No, sir.

Q. Have you reviewed Wendy Max' report in this particular case?

A. The report of December 6, yes, I have read that report.

Q. She uses SAMMEC, doesn't she?

A. Yes.

Q. Does she use any other approaches to calculate damages?

A. She makes certain adjustments using some Mississippi specific data, the behavioral risk factor surveillance system.

Q. That's not my question, Doctor. My question is does she use any other in addition to calculating health care costs, smoking attributable

health care costs using SAMMEC? Does her report use any other methodologies to arrive at a smoking attributable number for Mississippi?

A. She does use smoking prevalence data from other sources, yes.

Q. That's not my question.

Do you know after reviewing Dr. Max' report whether or not she relies exclusively on SAMMEC to calculate -- I'm not talking about what she puts into SAMMEC. Methodologies to calculate damages. Whether or not she employs one approach only or two approaches or three?

A. It's my appreciation that she is using a SAMMEC approach.

Q. So you're not going to offer expert opinion about a mortality ratio approach?

A. It's my appreciation that SAMMEC is a mortality ratio approach.

Q. Are you familiar with Hughes and Switzer in the literature?

A. No, I'm not.

Q. Do you know whether Dr. Max employed that approach in her report?

A. I don't know that identification, no.

Q. Tell me what else you know about

SAMMEC.

MR. HELMS:

Objection to the question. Vague. Be a little more specific.

BY MR. YOUNG:

Q. You can answer that.

A. Beyond what we already identified, you know, I don't know much more about the model than it is, you know -- the things we already said.

Q. Do you know the application Wendy Max, Dr. Max in applying SAMMEC or running SAMMEC for the State of Mississippi?

A. I don't know what you mean by the "application."

Q. Do you know what data she put in to run SAMMEC?

A. Various items that the SAMMEC model prompts you to ask to be input.

Q. What are those?

A. Some of those are various smoking prevalence rates. I don't recall what all the items are that are prompted for. It's been very well over a year since I looked at those documents.

Q. Okay. We established now you don't

know the inner workings of the SAMMEC model. Is that right?

A. Right.

Q. You won't offer opinions about the methodology or the inner workings of the SAMMEC model. Right?

A. Right.

Q. You talked about inputs to the SAMMEC model. I want to know your understanding of what the inputs are for the SAMMEC model.

A. I would need to go through the documentation and read what they are.

Q. Do you intend to offer opinions about what's input into the SAMMEC model?

A. No. SAMMEC model is what it is.

Q. Don't you have to feed data into it to get results?

A. Yes.

Q. What data does it require to get results?

A. I have to review the literature to see.

Q. I'm not meaning to be contentious in any way, shape, or form. We have a trial set for July 7 in this case. If you're going to testify regarding SAMMEC, all right, I need to know whether

you know anything about it, and one of the basic questions about that is what input data is required about SAMMEC.

If you don't know, that's fine. I just need to know. I need to know what you're going to say at trial about it.

Do you understand what I'm coming from?

A. Yes.

Q. Again, please tell me what's required as input for the SAMMEC model.

A. As we sit here today, I do not recall all of the input items. I read them once several months ago. I know where I would find those. I could look them up and read them.

Q. Well, then --

A. I will stop there.

Q. I don't want to interrupt you. Were you finished?

A. I'm finished. Period.

Q. You don't know today what the inputs are with regard to SAMMEC?

A. The precise inputs, I don't know to date.

Q. Okay. You are aware that data is to be input in to SAMMEC?

A. Yes.

Q. Without knowing what the data inputs are for SAMMEC, you can't distinguish that data from the Mississippi data, can you?

A. The input data would be Mississippi specific data.

Q. All right. What Mississippi specific data? What?

A. The items that would be prompted for that I could find the document and read what numbers the model prompts for.

Q. Well, are you going to testify input to the SAMMEC model is flawed?

A. No.

Q. Unreliable?

A. No.

Q. Now, we established that assuming you find out what the inputs are required in SAMMEC, the inputs by Dr. Max she put into this model are not flawed in your opinion. Is that right?

A. I don't know if they are flawed or not flawed. It's not -- I have not been asked to testify as to whether or not they are flawed.

Q. Paragraph 4 of your disclosure. "The flawed assumptions forming the basis for

plaintiff's statistical model that attempts to estimate the Mississippi Medicaid costs attributable to smoking." All right.

A. All right.

Q. Are we talking about SAMMEC, or are we talking about the Vince Miller model?

A. We are talking potentially about both of these. This does not talk about flawed data.

Q. Now, we're down a good path. Assumptions.

A. That's what mine says.

Q. What assumptions are required by the SAMMEC model? What does the model require? What are assumptions in the model?

A. The basic assumption I am concerned with is the assumption that the way in which the model was constructed is applicable to the Mississippi Medicaid population.

Q. I am having a hard time. You told me you don't know how the model was constructed or the inner workings about the model or anything about the methodology of the SAMMEC model. Didn't you tell me that?

A. Yes. The concern -- my testimony here is to indicate the sorts of differences that would

need to be accounted for a model to, in fact, work.

Q. For what model to, in fact, work?

MR. STREETER:

Let's shorten this line of testimony if I can talk to Dr. Long a second. I mean I think this testimony is becoming -- your questions are becoming argumentative and abusive and attempting to embarrass the witness. If I can talk to him --

MR. YOUNG:

David, do you agree with that characterization?

MR. FONVIELLE:

Clearly not abusing the witness.

MR. HELMS:

Let's take a break for a second if that's okay. I'm not accusing you of anything, Lee. I am trying to help you take a more efficient deposition. That was not --

MR. YOUNG:

Well --

MR. HELMS:

That was not meant to be a comment on your style. It was meant to try and save time.

MR. YOUNG:

Saving time if the witness is going to talk about the SAMMEC methodology and flaws and assumptions involved in that -- if he will say I won't discuss it.

MR. HELMS:

Keep asking questions. Go ahead. I won't help you.

BY MR. YOUNG:

Q. Doctor, what assumptions?

A. Where was I?

(The requested testimony was read back as follows:

A. Yes. The concern -- my testimony here is to indicate the sorts of differences that would need to be accounted for for a model to, in fact, work.

Q. For what model to, in fact, work?)

EXAMINATION BY MR. YOUNG:

Q. For what model?

A. It's my appreciation there are three different models which may be put forward by the plaintiff.

Q. What are those three models?

A. The three models reported by Wendy Max,

by Vince Miller, and by Dr. Oster.

Q. All right. Your belief is that Wendy Max has only done one approach, model approach?

A. She has used mortality approach for her estimations.

Q. All right. Now, what assumptions that you're talking about need to be corrected for -- what are the assumptions in SAMMEC that are not considered?

A. The general subject matter of number four is the fundamental assumption that the construct of the models being put forward are applicable to the Mississippi Medicaid population.

Q. Now, what does "construct" mean?

A. That the intrinsic assumption in applying any of these models is that the real world information which went into the construction of the model is sufficiently similar to or can be adjusted for the differences between that population and the Mississippi Medicaid population.

Q. Now, we are getting somewhere. I want you to tell me what intrinsic information is in the SAMMEC model.

A. At this time, as I have previously testified, I have not looked at the characteristics

of the underlying data used to construct the SAMMEC model, the population characteristics. They would be -- to compare those characteristics to the known characteristics of the Mississippi Medicaid population to the extent to which they were different.

Q. You haven't done that?

A. I have not done that.

Q. As we sit here today, you don't know, do you?

A. How different they may be.

Q. So you really can't form an opinion on that as we sit here today, can you, Doctor?

MR. HELMS:

On what?

BY MR. YOUNG:

Q. Intrinsic differences between SAMMEC and the Mississippi Medicaid population?

A. That analysis has not been done at this time.

Q. That's the basis for your opinion with regard to SAMMEC, isn't it? That's the whole purpose of that section, isn't it?

A. The extent to which, you know, these characteristics are distinct. Then to see whether

or not SAMMEC accounts for such differences.

Q. That's the extent of your testimony, isn't it, with regard to SAMMEC? Isn't it?

A. Whether or not that will be the case, yes.

Q. You don't know, do you? As we sit here today, you don't know?

A. As I sit here today, I did not know whether or not the SAMMEC model adequately adjusts for whatever differences may exist between its original construct and the Mississippi Medicaid population.

Q. You're not prepared to give opinions in that regard today, are you?

A. The testimony that I will give is the extent to which there are differences which need to be accounted for. Not whether or not it does, in fact, adequately account for them.

Q. It doesn't matter if it does? It doesn't matter if it accounts for those then?

A. I would think it would matter a great deal.

Q. You can't tell me as we sit here today whether it does or it doesn't?

A. No. That is not what we have said I

will testify to.

MR. HELMS:

Let's take a break.

MR. YOUNG:

Go ahead and take your break.

(A break was taken.)

BY MR. YOUNG:

Q. Dr. Long, during the recess you went and deferred with counsel. What did you discuss with counsel?

A. We discussed the extent to which you had the answer to the question you were asking.

Q. Tell me if I had the answer to the question I was asking.

A. It was our opinion that you did.

Q. Which was?

A. Which was that I do not at this time have the information of the population characteristics that were used to build the SAMMEC model, the mortality rate model. When that information is made available to me, that I stand ready to testify on the extent to which those populations' characteristics differ, if they do, from the Mississippi Medicaid population which I do know the characteristics of.

Q. All right, now, do you need Vince Miller or Wendy Max to give you the characteristics involved in the SAMMEC methodology?

A. I am indifferent as to the source as long as it's accurate information.

Q. Well, what I am getting at is you're not waiting for a report from Wendy Max or Vince Miller in order to arrive at the information built in to SAMMEC, are you?

A. I am not explicitly expecting to get it from Wendy Max or Vince Miller.

Q. Well, who are you going to get it from?

A. I don't know that at this point.

Q. Are you going to try to get it?

A. I am certainly going to request it, and it may be something that is presented at trial. I don't know.

Q. Well, was there anything that impeded you from getting the information prior to today?

A. Generally the -- apparently only very recent discovery with respect to those experts for the plaintiff.

Q. That's the reason that you don't know about SAMMEC until today?

A. That may be a contributing factor to

it.

Q. Well, so without that information today, you can't give the opinions that we discussed regarding the makeup of the SAMMEC model and the distinguishing characteristics between the population and SAMMEC versus Mississippi Medicaid?

A. But I could certainly tell you about the Mississippi Medicaid population.

Q. You can't do a comparison between that and the SAMMEC model?

A. Because I do not have that information.

Q. Mark this for me.

Can you identify Exhibit #5 for me, please?

A. Appears to be a letter to Lucy Eisenberg from William Butler on the subject of SAMMEC2 with what appear to be print images of computer screens of various data associated with the model plus additional noncomputer attachments.

Q. Do you recall that's one of the documents you provided to us today?

A. I don't specifically recall that document, but the documents which were provided included the request for everything which had been

supplied to me by counsel, and I'm sure that falls in that category.

Q. Who is Lucy Eisenberg?

A. She's an attorney.

Q. For whom?

A. I don't recall which defendant her firm represents.

Q. For a tobacco defendant?

A. I believe it's for a tobacco defendant. I'm not positive about that either.

Q. Who is ChemRisk?

A. I have no idea.

Q. Have you seen this analysis before?

A. I don't recall having seen that document.

Q. It appears from here, and you can look at it again, somebody has run this -- ChemRisk has run the SAMMEC version for Ms. Eisenberg. Isn't that correct?

A. They apparently -- the letter says they performed three additional analyses which are described below. Then it attaches these printouts.

Q. Did they find zero dollars attributable to smoking?

A. I would have to read this to see.

Q. Well, go ahead.

A. The answer to your question is they did not find zero.

Q. What did they conclude was the smoking attributable fraction for expenditures?

A. Overall depending on which of the assumptions or set of runs they did, apparently somewhere between 2.7 and 3.5 percent compared to some benchmark of 7.1 by Bartlett.

Q. Are you familiar with the Bartlett, et al they refer to in there?

A. I'm not.

Q. You could have run SAMMEC, couldn't you, Dr. Long?

A. If I had the program and the input data, I could have put the numbers into the Lotus spread sheet I'm sure.

Q. Did your client, any of your clients, whether it be the law firms or the tobacco companies, ask you to run SAMMEC?

MR. HELMS:

Lee, why do you keep trying to interject that? It's irrelevant. You know what his testimony is. You are trying to distort the record. If you want to ask him about the

companies, ask him about the companies. If you want to ask about his clients, ask him about his clients.

BY MR. YOUNG:

Q. You can answer.

A. The law firms have not requested I run the SAMMEC model.

Q. Have any of the tobacco companies asked you to run the model?

A. They have not.

Q. Could you identify for me, please, Exhibit #6?

A. It's a memorandum to my associate, Ms. Howlett-Willis, from a Cory Daehn at the Stuart Cunningham organization in Chicago.

Q. Who is Stewart Cunningham?

A. This is an organization that does database management information systems services.

Q. Are you working with them as a consultant?

A. No. They are providing services to my organization.

Q. I thought we talked about earlier that it was just you and Ms. Howlett-Willis.

A. As persons doing substantive work.

They are simply providing downloads of information that need to be put into smaller pieces so we can handle it from a mainframe.

Q. Where are they getting their information from? What information are we talking about?

A. MMIS, Mississippi Medicaid information.

Q. They have taken the MMIS tapes?

A. Yes.

Q. Have you asked them to do certain things with them?

A. Yes.

Q. Generally what have you asked them to do?

A. Give us certain subsets of that information in CD-ROM form that is small enough quantities of information that we can manage it on our own facilities which are basically PC facilities.

Q. For what purpose?

A. For the purpose of analyzing the Mississippi Medicaid population.

Q. For what purpose?

A. To ascertain the demographic and diagnostic characteristics of that population, to

be able to offer comparisons between that and the populations used to generate the models that may be presented by the plaintiffs.

Q. So you have asked them to take the MMIS data and break it down by both demographics. Is that right?

A. No. We asked them to give it to us in pieces such that we can then do the analysis and the -- get the distributions of the population and the various characteristics and cross tabs, et cetera. We have not asked them to do the analysis.

Q. What sections did you ask to be provided to you?

A. That is part of what is contained in this memorandum.

Q. Generally what have you asked them to provide to you?

A. Basically things like the age or the birth date, and in this case, gender, racial characteristics, identifier numbers.

Q. Isn't that type of information found on the HCFA 2082 report?

A. Not for individual claims.

Q. You want to link it up to individual

claims?

A. We are talking about individual people. Both persons and episodes or claims within the Medicaid system.

Q. All of that appears on these reports that you have produced? You have done that work?

A. We have done that work, yes.

Q. You broke it or you're further breaking it down by the demographics linked with the claims. Is that right?

A. That's right.

Q. What about diagnostic?

A. We got diagnostic information in there for ICD-9 codes.

Q. For instance, lung cancer, total number of lung cancer?

A. Right. Or Alzheimer's or whatever.

Q. How did you decide which ICD-9 codes you wanted?

A. Basically from the attorney general's list of smoking related ICD conditions which we match up with ICD-9 codes.

Q. Do you know where that list came from?

A. You mean the copy which --

Q. Do you know where the attorney general

could have gotten his list of smoking related conditions?

A. I actually don't know the history of that.

Q. Do you know where there's a listing of smoking related ICD-9s or smoking related diseases?

A. It's my appreciation that that is something that was produced by the attorney general.

Did I say attorney general?

Q. Yes. I'm sorry?

A. Surgeon general.

Q. You have no reason to dispute the Surgeon General's Report with regard to that list of smoking related diseases?

A. We accepted that list as the things we would want to investigate.

Q. In fact, those are commonly -- is it a commonly accepted list by people in your field all the time, isn't it?

A. That's my appreciation.

Q. When I say, "the list," I mean the list of diseases in the Surgeon General's Report.

A. Yes.

Q. Have you asked them to do anything

besides take the MMIS tapes and break them down into manageable sections to further break them down into demographics and diagnostic information?

A. That's correct. We have not asked for any other services than that.

Q. You essentially are analyzing the MMIS tapes to get a breakdown by claim type, the demographics by claim payment?

A. We are doing several layers of analysis. We are looking at, you know, just simple data such as age category distribution in the population, whether or not there were long-term care claims or not long-term care claims, what does the population over the age of 65 look like compared to the population under the age of 18. We are doing a variety of cuts on the data, if you would.

Q. I will hand you what's been marked Exhibit #7. If you could identify that for me, please?

A. This is a cover letter addressed to myself from Lucy Eisenberg listing some materials that she sent to us back in October of 1995.

Q. Have you reviewed those materials?

A. Some of these we -- I have personally

reviewed in some detail. Some of the others were ones that we just talked about with respect to SAMMEC.

Q. Tell me what is number one.

A. That is the earlier Kaiser Commission on the future of Medicaid report. I don't remember the date of that one. The newer one is November of 1996.

Q. All right. I will hand you what's been marked Exhibit #8. Could you identify that for me, please?

A. This is an earlier outline of things that might be contained in testimony that I would ultimately give, again, dating from October of 1995.

Q. May I see that? Did you prepare this?

A. Yes.

Q. Did you give a presentation?

A. No.

Q. This is what you anticipate your testimony to be?

A. At that time those were things that might be in that list of testimony.

Q. In section three of this outline on Page 2, you talk about the validity of economic

assumptions embedded into plaintiff methodology, and under that is A, SAMMEC. You don't know the assumptions embedded in SAMMEC, do you? We discussed that earlier?

A. We discussed that.

Q. You don't, do you?

A. That's correct.

Q. That's been marked Exhibit #9.

A. This is a page and half bibliography of mostly articles, some other articles that all deal with use of statistical models to calculate the cost of smoking attributable diseases apparently compiled by Ms. Eisenberg in June of 1995.

Q. Have you done a review of that literature?

A. I have not.

Q. Will you be critiquing any of the studies or analysis that are presented on Exhibit #9?

A. I have not been asked to do that.

Q. With regard to the use of statistical models to calculate smoking related health care costs?

A. I have not been asked to critique any of those articles.

Q. You will not be doing that at trial?
A. I don't expect to be.
Q. Do you have any reason to disagree with any of these?
A. I have not reviewed them.
Q. Let's go back to your disclosure statement. Have you got your copy in front of you? Paragraph 4, again.
Now, we talked about SAMMEC, and your understanding is that is the only approach Wendy Max is doing in this case?
A. I think we talked about that she is using mortality based approaches of which SAMMEC is an example, yes.
Q. Is she using any other approach besides SAMMEC?
A. I think she has, you know, a variation on mortality based approach in her report. I have not reviewed it.
Q. Do you know what her assumptions are in that approach?
A. I don't at this point.
Q. You are not prepared to give opinions as we sit here today regarding the assumptions she made in the model or what the other approach

involves in distinguishing it from the Mississippi Medicaid population?

A. That's right. I have not seen a listing of her assumptions.

Q. Have you reviewed her report?

A. I have read her report sometime ago, yes.

Q. You're not prepared to tell me what your testimony is going to be about her report as we sit here today concerning that approach?

A. My testimony again would be based -- would not focus on the report per se, but on the nature of the database on which the models were built.

Q. The non-SAMMEC model, the mortality ratio, what model is that based on? What assumptions are used?

A. I don't know the population.

Q. You can't draw any comparisons as we sit here today between that model and the assumptions made in that model and the Mississippi Medicaid population?

A. Until I have the characteristics of those populations. What I know about the Mississippi Medicaid population can be compared

against those as soon as I know what they are.

Q. What about the Vince Miller model, what are the flawed assumptions in the Vince Miller model?

A. We are talking about the same fundamental assumption about the applicability to the Mississippi Medicaid model. We are looking at the NEMIS 2 or the NEMIS data set and the extent to which that population differs from the Mississippi Medicaid population.

Q. Okay. So, first of all, let's make sure we are clear on what Wendy Max has done, mortality ratio report and SAMMEC approach. You don't know the assumptions that went into those models in order to testify as we sit here today regarding the comparisons and therefore the flaws?

A. The population characteristics.

Q. That's what your whole basis in Paragraph 4, that's the basis for your opinion?

A. Paragraph 4 deals with that.

Q. You can't do that as we sit here today, can't form your opinions with regard to the mortality ratio approach or the SAMMEC approach, can you?

A. I don't have the population information

to make those comparisons.

Q. So you can't testify about your opinions today with regard to those two approaches, can you?

A. With respect to those differences, that's correct.

Q. Now, let's concentrate on the Vince Miller model. Okay? You have got March 7 model or the report?

A. March, right.

Q. By Vince Miller?

A. Yes.

Q. First of all, are you going to offer opinions about the construct of the Vince Miller model?

A. In the sense the variables which have been included in that model, one of the concerns that I expect to testify about would be the factors which are not included in his variable set.

Q. Okay. The inner workings of the model?

A. I did not expect to testify with respect to the equations and the statistical mechanisms.

Q. Logit or probit, R squared, you won't

testify about?

A. That's correct.

Q. Goodness of fit, you're not going to testify about that?

A. I will not -- I did not expect to be asked to be doing that analysis. I may very well be told what that analysis is or hear it from plaintiffs' experts at trial.

Q. So you are really talking about the input variables that went into the Vince Miller model?

A. Input variables and the population from which they were drawn.

Q. What are the input variables for the Vince Miller model?

A. There's a whole list of things that were used, race, gender, age cohorts, marital status, educational status, self description of risk behavior, whether or not physically active, degree of being overweight, whether seatbelts are employed --

Q. Are they all on that page?

A. Yes.

Q. What page are you referring to?

A. Page 10 of the March 8. The cover says

March 7; the page says March 8.

Q. You actually got the NEMIS data tapes, didn't you?

A. Yes.

Q. Did you review them yourself?

A. Yes.

Q. Did you do slices and dices of the NEMIS data?

A. Yes.

Q. Are those in these reports that you produced to me?

A. Yes.

Q. Now, how were you trying -- what were you trying to do with the NEMIS data? How were you trying to break it down?

A. Trying to take characteristics of the NEMIS population or subsets of the NEMIS population and match them up against comparable subsets of the Mississippi Medicaid population.

Q. Which subsets of the NEMIS population were you particularly looking at?

A. Well, we did some analysis by age category against the actual utilization of NEMIS -- Back up.

The Miller implementation or use of the

NEMIS data was limited because of certain limitations in that data set. For example, the portion of the NEMIS data set that was relevant was the noninstitutionalized population within NEMIS because of the absence of smoking behavior in the institutionalized -- that is the data set did not include smoking behavior of the institutionalized portion which is why nursing home things are treated differently in the model.

We took the noninstitutionalized portion of NEMIS and then tried to stack that up against the noninstitutionalized portion of Mississippi Medicaid. We looked at different age cuts, over 65, noninstitutionalized.

Q. All this is in these --

A. These various cross analyses, some with cross tabs, just looking at a particular single characteristic at the time are all in the data sets.

Q. When you broke it down, the NEMIS population down, did several of the cells -- you can call them whatever you want to call them -- result in very few people being present in certain cells?

A. The level of the analysis which we did

on the primary things, you know, basically, the only place you start getting small numbers is when you start talking about people over the age of 85, and you may get numbers down around 2,000 in some of the marital categories.

Q. How big was the NEMIS population?

A. Somewhere in the vicinity of 38,000.

Q. Do you know any other national data set that has smoking history and medical expenditure in it?

A. Any other national?

Q. Any other data set.

A. That has?

Q. Publicly available data set that has smoking information and medical expenditure information linked to individuals.

A. I'm not aware of any other significant data set.

Q. I will get you to tell me what your testimony, what you expect your testimony to be with regard to the Miller model and its flaws if you will list those for me.

A. Okay. I would be concerned by a number of -- the number of factors being included probably being insufficient to describe the complexities of

the population with respect to seeking a smoking attributable fraction in these various categories. One of the limitations which he points out in his report is the absence of alcohol use which may be a significant covariant with smoking. I don't see any data on drug use. I don't see any -- he does a number of interactive terms. I don't see any interactive terms with weight.

I see only sort of a yes, no, variable on physical activity, but there are lots of different kinds of physical activity. I don't see other risky behaviors such as perhaps use of helmets when riding bicycles, motorcycles, et cetera. I don't see any data on another important risk factor in many of these ICD-9 codes such as serum cholesterol. There's a lot of things that could make the model arguably better that are not there.

That would be one area of concern.

Q. Have you --

MR. HELMS:

I'm sorry. Had you finished your answer on all the areas of concern?

THE WITNESS:

That's one of the first of several

MR. YOUNG:

I thought it would be easier to ask him a question about it.

MR. HELMS:

As long as it is clear he has not finished the answer.

BY MR. YOUNG:

Q. These are variables that you think need to be controlled for that are not controlled for?

A. That's right. That are absent from the model.

Q. I didn't think you were going to talk about the inner workings of the model or the equations.

A. I'm not talking about whether or not the logit or the probit mechanics were appropriately done or whether use of dummy variables as opposed to continuous variables or any of the more technical items, but simply looking at the input side we would have better information, better model if we had some of these other known either behaviors or conditions included as explanatory variables.

Q. How did you know that there's risk associated with drug use or alcohol? Where did you

get that information?

A. If what we are talking about the medical expenditures, we know that, you know, there are lots of medical expenditures associated with overuse of alcohol. Motor vehicle accidents that lead to personal injury, for example. Drug overdoses produce medical expenditures.

Q. Did you try to run the Vince Miller model?

A. I haven't gotten the Vince Miller model.

Q. Have you asked for it?

A. I am told that it has kept changing fairly frequently and that I will get to see it when we know what it is.

Q. You're basing what variables that you're talking about are based on what he reported in his report?

A. Yes. If I get a new report and it says, "We have alcohol use and drug usability in," that's fine.

Q. Do you know if Dr. Miller put in a surrogate or anything for any of these variables?

A. For any of which variables?

Q. Alcohol usage, weight?

A. He makes the statement in the report that he thinks the covariant effect of alcohol might be very small because he sees small covariant effects in the covariants that he did put in.

I am much less comfortable leaping to that conclusion. He asserts it without actually producing evidence that would be a reasonable statistical conclusion.

Q. You think that's wrong?

A. I think that it's to be questioned.

Q. Do you know whether anybody has questioned it or not?

A. I would assume that plaintiffs' statistical experts and perhaps defendants' statistical experts would be exploring those questions.

Q. What other problems are you going to testify about?

A. I am concerned that the smoking attributable fractions that --

MR. HELMS:

I'm sorry. I didn't mean to interrupt. I think you changed the question.

MR. YOUNG:

He knows. He is going to number two.

We covered one.

MR. HELMS:

Sorry. I think the question changed. If it doesn't matter to you, that's fine.

BY MR. YOUNG:

Q. What's your understanding of what I am asking?

A. I will eventually get through the list of things that I would find to be concerns about the Miller model.

Q. That you will testify about?

A. That I would be testifying about.

Q. I want to know them all. Give me number two.

A. Another concern is that the smoking attributable fractions that are generated encompass some very different medical care use both in terms of what services we are talking about, and in terms of the mixture of services and providers that would be better dealt with if we were able to segment that population.

Generating a factor for hospitalization expenses for the entire noninstitutionalized population means that we are picking a single number to deal with, for example, persons who are

over the age of 65 as well as persons under the age of 65, persons who are disabled as opposed to persons who are not disabled.

To the extent that the representations of those persons differ from the populations and to the extent they use very, very different mixes of services and represent different proportions of medical expenditures leads me to a concern of using sort of a single number that cuts across all those different subpopulations.

Q. You mean applying SAF to expenditures, not how the SAF is generated, right?

A. We are applying a single SAF to all hospitalization, for example.

Q. In the Medicaid expenditures?

A. Yes. Medicaid hospitalization expenditures even though we know that different subpopulations within Medicaid and indeed within NEMIS itself have very, very different hospital utilizations and for different reasons.

Q. How would you have done it?

A. Well, one of the things I would certainly want to explore is generating a model in which you stratified the model for different classes of individuals, and that could be cut in

one of a number of ways and might want to try many different ones. But certainly one could stratify it on sex, on race, on age, just to use some of the data that is in the set.

I would also want to look at the difference between disabled and nondisabled persons since disabled expenditures in the population at large are fairly small percentage of health care expenditures. In the Medicaid population they are huge percentages of the expenditures.

Q. Is that number two?

A. Yes.

Q. On number one, how would you have done it, corrected for these variables that you say were not adequately represented in the model?

A. Ideally I would like to have had that in the data set to begin with.

Q. We know that's not always possible, don't we?

A. It doesn't seem to me it would have been difficult to do some of those things in that process. Some of those have to do with --

Q. Did Vince Miller do the NEMIS survey?

A. He did not.

Q. Do you know how much the NEMIS survey

costs?

A. I don't.

Q. Any idea?

A. No.

Q. Do you know how long it took to compile?

A. I think the data was compiled over four quarters.

Q. Of a year?

A. Yes.

Q. Have you head read about the NEMIS survey?

A. Only in conjunction with its use here.

Q. You have no idea how much it cost to do that?

A. I don't know how much it cost.

Q. What's the third one?

A. Another one would be the general concerns that we discussed earlier today having to do with wanting to see, you know, the extent to which we have so-called goodness of fit, the extent to which this model works on populations similar to the one from which it was built.

Q. Explain that.

A. We built this on a survey of persons in

1987. If I took these equations and used them on a survey of people in 1997, it would -- would I in fact get results which matched what I could empirically observe as to the expenditures of those people in 1997.

Q. Is that about --

A. I am making the distinction between this model well describes the population on which it is built.

Q. This model does?

A. I am asking. That's question number one. That's a different question than the question of does the model work on another population that in terms of these variables looks the same.

Q. All right. Now, have you done a statistical analysis, and is this all called goodness of fit?

A. No.

Q. Did we skip goodness of fit and go to something else?

A. The first issue is the goodness of fit. Does it well describe the population from which it was built.

Q. That's number three?

A. No. Number three in the big list?

Q. Yes.
A. We were number three in the big list.
Q. What is number three generically?
A. Generically the applicability of the model, the goodness of the model, if you would. Does it fit the population that it was built from. That's the statistical significance kinds of things we talked about earlier.
Q. Are you doing any analysis?
A. I am not.
Q. Are you planning to?
A. I'm not planning on doing the analysis.
Q. You are just throwing up the question, you're not doing analysis of your own as to form opinions one way or the other?
A. I expect your experts or defendants' experts who will be looking at the issues will provide that information when they know it.
Q. You will defer to their findings?
A. I will defer to their findings.
Q. What else within that?
A. Then, if it happens to fit really well, then the question is does it predict another similar population.
Q. I.e., the Medicaid population?

A. No. A similar population. If you gave me another 38,000 people who looked exactly like the people in the NEMIS data set and I ran the model on them and it told me that I had this much smoking attributed cost, and then I went out and looked at the costs, would it give me a number that was somewhere in the same ballpark.

Q. What techniques would you employ to do these tests?

A. That would require some empirical verification, applying the model where it ought to work.

Q. Is that called boot strapping? Have you heard that term before?

A. I have not heard that term in this connection.

Q. Okay. Have we finished number three?

A. No.

Q. Okay.

A. I would then want to look at the stability of the model through time. Maybe it tells me wonderful things about 1987 and wonderful things about lots of different populations in 1987, lots of different samples, but does it tell me anything about 1995.

Then the final part of number three would be the extent to which the model can transfer or be transferred with appropriate adjustments to a population that's dramatically different from the one on which it was built.

Q. I take it that's going to be one of the four, five, or six coming up, the NEMIS population is dramatically different?

A. From the Mississippi Medicaid population.

Q. We will get to that?

A. Yes.

Q. Extent to which model can be transferred to or be something --

A. Transferred or modified so that it can be transferred to be used with a very different population.

Q. Do you know whether or not the NEMIS population included individuals on public aid?

A. It did. Yes, I know. It did.

Q. Okay. I'm just asking.

Are we finished with number three?

A. I think pretty much.

Q. All right. How many more do we have to go?

A. Two or three more.

We have already made passing reference to these earlier. I guess these in some sense could be categorized.

The extent to which the smoking attributable fractions are applied to expenditures which while in the Medicaid box are not expenditures for medical care services that vary with population, disease, et cetera.

For example, DISH, and the Medicare buy-ins which are fixed numbers that do not escalate with respect to actual medical expenditure experience.

Q. Would that have to do with maybe projecting forward and things of that nature?

A. I'm sorry?

Q. Projecting forward and determining the cost?

A. No. This is not with the forecasting. This is saying that if a requirement of the Medicaid -- federal Medicaid program is that states have to pay the part B premium for Medicare, given that the part B premium is not higher or lower because of any smoking attributed conditions, but is, in fact, fixed by a statutory scheme, and that

the state would be paying it whether anybody smoked or anybody didn't smoke, that smoking attributable fraction should not be applied to the buy-in amounts or similar argument the DISH amounts.

Q. DISH amounts are to help compensate the Charity Hospitals for indigent care they provide?

A. Yes.

Q. And don't recover via Medicaid?

A. Because they are providing services to non-Medicaid people.

Q. It helps them cover their uncompensated care?

A. Correct.

Q. Those medical services are provided, they just don't get compensated for them to some extent?

A. Yes.

Q. DISH helps come in and compensate them for that care?

A. That's generally the policy and intent of the mechanism.

Q. The extent to which SAFs are applicable to expenditures that you say are not higher or lower because of smoking?

A. That are not for direct services to

Medicaid patients.

Q. Okay. DISH being one, premiums fixed by Medicare?

A. Medicare buy-in.

Q. Number five?

A. Number five would -- these are not in any particular order.

Number five would be needing to know --

Q. What are you looking at?

A. The Miller report.

Q. Okay.

A. Needing to know what is going on in the forecast portion of the Miller report.

Q. What do you mean?

A. There is very general language that forecaster developed from some kind of historical trends.

Q. You're not saying it's wrong, you just don't know enough on what he did?

A. I don't know what he did and the report doesn't tell me, and I don't understand why the report says in Mississippi Medicaid expenditures declined between '95 and '94. I don't know why --

Q. Did you look to the Mississippi Medicaid documents to determine that?

A. I can't find anything like that in the Mississippi Medicaid reports.

I don't know why he thinks that hospital expenditures will go up 2.7 percent per year and mandatory care expenditures will go up 17.2 percent per year.

Q. You just don't know how he did that?

A. That doesn't match with realities that I know about.

Q. How much do you think they will go up?

A. Hospital expenses may go up more than 2.7, and the others less than 17.

Q. As far as hospital expenses, he could be conservative on that estimate?

A. He might be. The methodology just leaves me puzzled.

Q. On the forecasting?

A. On the forecasting. I can't replicate his Medicaid numbers from historical Mississippi reports. Apparently some small adjustments that have been made.

Q. Have you looked at the HCFA 64 reports?

A. I know HCFA 64 reports made some adjustments.

Q. Have you looked at them for

Mississippi?

A. I have looked at selected ones.

Q. How many have you look at?

A. Probably looked at four.

Q. That really went to Paragraph 8 of your disclosure statement. Have we covered that now?

A. No. That does not cover 8.

Q. Forecast, not enough information how he forecasted to determine whether it was right, wrong, or indifferent. Is that right?

A. Right.

The extent to which the -- we talked in part about the longitudinal vitality of the model. The extent to which working off of a particular year allows us to predict other years, whether or not the model has, in fact, been appropriately adjusted for changes in the Medicaid program itself through time.

Q. Does that have anything to do, or could it have anything to do with the smoking prevalence over time?

A. Well, that's another separate question. First issue is the extent to which there are services covered in some years that are not covered in other years. That covers treatment for

things that are or are not smoking attributable. The extent to which different populations are in the covered population if only because the law has changed thereby changing since different pieces of the population have different smoking prevalences, does it adjust for the fact that at different times we have different mixes of people in the Medicaid program.

Q. So five was forecasting. Six was what?

A. Other factors effecting the applicability of the model through time.

Q. What is that called in economics?

A. If I wanted to put a technical term on it, I suppose it would be longitudinal vitality.

Q. Okay.

A. Or robustness.

Q. All right. Now I heard that one. Next?

A. That relates both to the covered services and to the covered population.

Q. Because essentially the nuts of it is that you're going to -- you're saying that because services change over time, coverage changes over time, you don't know how this model is going to

play out or how good it does?

A. I don't know what adjustment he made to the model to account for that.

Q. That's very understandable.

We are up to number six. Don't give me too many more.

A. Another major concern is the --

Q. Before we leave six, do you know if he made adjustments?

A. There's nothing in his report that suggests that he has. That doesn't mean he hasn't. I am waiting to find out.

Q. Do you know how statistically significant that would be one way or the other?

A. I don't.

Q. Would you defer to Dr. Miller on that issue?

A. As to whether or not adjustments have been made. As to whether or not they are statiscally significant, I would like to have statisticians indicate whether they are statiscally significant.

To the extent, for example, that Medicaid has been adding young people, minors in recent years, and smoking prevalence is lower among

minors than it is among the general population according to Mississippi epidemiologists, then it seems to me that would suggest that there should be adjustment in the SAFs through time. I didn't see that in his report. I saw him using exactly the same every year.

Q. Do you know whether it could have been awash between high smoking prevalence in the '70s versus lower smoking prevalence now?

A. Is it okay to have too big a number in 1995 because you had too small a number in 1972?

Q. I'm saying in terms of working at SAFs, if that's a consideration or not?

A. It would depend very much on the pattern in which smoking prevalence changed.

Q. It's an issue you would like to look at?

A. Yes.

Q. Have you looked at that?

A. No. These are things that I am asking for information to --

Q. I understand you're taking your shots at the model. Is that not what we are doing here today? You are critiquing Vince Miller's model?

A. These are things that I have no

information at this time have been accounted for.

Q. All right.

A. A large concern is whatever it is that the model is attempting to do to deal with the institutionalized population.

Q. The good old nursing home issue?

A. A nursing home issue, certainly.

The report indicates that there is some kind of a weighted average of the hospital, ambulatory, pharmacy, other pieces of the model to be applied to long-term care. The report doesn't tell me anything about what those weights are, how they were derived.

Q. You're not disagreeing with it, you would simply like more information?

A. I would like more information. I am concerned that the different pieces that are being weighted, no one of them looks like nursing home resource use, resource costs.

Q. What about if you don't have the data, Dr. Long?

A. Then you may be in a situation where you would only be able to speculate.

Q. Do you ever speculate in your field?

A. The question, I guess, is whether or

not a court would look kindly on speculative data.

Q. I think we talked about when you don't have data, you use the best available data you have got. Isn't that right?

A. Well, what may be done outside of the legal environment is perhaps not the same thing that would be done in a legal environment.

Q. Is this it? The problems with the institutionalized population?

A. There are several subpieces to that including the fact that the institutionalized population, Mississippi Medicaid, is again dramatically different from the noninstitutionalized Medicaid population by all of these same measures; gender mix, marital status, racial mix. If you look at the people in the nursing homes in Mississippi Medicaid, they look nothing like the rest of the Mississippi Medicaid population.

That raises the whole spectrum of issues from the very beginning --

Q. Where did you gain the information?

A. MMIS and MDS+.

Q. You looked at MMIS and MDS?

A. Yes.

Q. Were those tapes reliable?

A. They have some miscoding, some of which we were able to correct for the cross match in ID numbers between MMIS and MDS+.

Q. Was there smoking information on the MDS+?

A. I don't remember right off the top of my head.

My best recollection is that they did not. We have other smoking prevalence data that I saw in Dr. Courier's deposition, and in the exhibits thereto.

Q. Talking about for Mississippi?

A. Mississippi.

Q. Can you apply that smoking prevalence when you're doing these?

A. Not in a precise way, but you look at the characteristics of the nursing home population which is clearly predominantly over the age of 65 where you have generally lower smoking prevalence. Predominately female where you have lower smoking prevalence. Much less African American which in the case of males would mean lower smoking prevalence, so that the characteristics that you're looking at there of that population are all the

characteristics that for all persons of those characterizations are associated with lower rates of smoking prevalence.

You also see the majority of persons in nursing homes for the Medicaid population are there for conditions that are related to mental impairment, dementia, et cetera, and, you know, those conditions are not on the surgeon general's lists.

You also see in the nursing home population persons who have been married or -- but are largely widowed, and persons in those categories, we look at the marital status data also have lower smoking prevalence. There's a number of factors there that that population, that portion of the Medicaid population is very different from the rest of the Medicaid population. Also very different from the categories of medical expenditures for the rest of the population.

If you look at hospital expenditures, if you look at ambulatory care expenditures, medication expenditures, you don't see proportions of the money being spent on room and board and support for activities of daily living, and entertainment expenses and the kind of things we

are really paying for in the nursing home population.

Q. Have we finished with the institutionalized deal?

A. I think I have touched on most of the things that would be included in the concerns about the model's approach to assigning SAFs for long-term care.

Q. Are you looking for a perfect model, Dr. Long?

A. The --

Q. Is there such a thing as a perfect model?

A. Not to my knowledge.

Q. Have you ever produced a perfect model?

A. No.

Q. Is that the extent of your testimony concerning the Vince Miller model?

A. Well, I would expect that I will be learning a great deal more about Dr. Miller's model as that information becomes available.

Q. It's available. You have it. You have got the report.

A. That's what I have. I have the report

that excludes information on all those things I just talked about. I would expect there will be more information about that model from --

Q. Talking about reviewing his deposition?

A. Yes. Which I have not seen.

I would be surprised if there wasn't information in the deposition not directly contained in the report. There may be testimony at trial that will disclose new information that I haven't previously seen. I would expect to take any and all of that into account.

Q. Have you looked at the historical evolution of the Vince Miller model?

A. No, I have not.

Q. Would that be important to you in terms of the critiques already leveled at the model and whether or not the critiques were corrected for?

MR. HELMS:

Whose critiques?

BY MR. YOUNG:

Q. Anyone's.

A. I have not seen anybody's critiques. I would certainly hope that whatever the content of critiques may be as well as the kinds of concerns that I have been talking about would be addressed.

Q. Does the Miller model incorporate any Mississippi specific information?

A. It incorporates several pieces of Mississippi specific information. The U.S. data, the unpronounceable acronym.

Q. BRFSS? I say it. Everybody doesn't.

A. As well as current population survey, that portion of population data.

Q. Are you going to testify in any way as to accuracy or reliability of that survey data?

A. I haven't been asked to do that.

Q. Have you ever used any of that survey data?

A. I have used current population survey data.

Q. You used that?

A. Yes.

Q. What capacity?

A. Presentations, citing the data.

Q. You generally find it reliable?

A. Like all survey data, it is not perfect.

Q. You find it reliable enough to cite it?

A. Reliable enough to cite it.

Q. What else have you used?

That was a bad question.

You never used the tobacco use supplement?

A. No.

Q. Have you used the behavioral risk factor survey?

A. I have not.

Q. Do you know any other ways that Dr. Miller has put in Mississippi specific information?

A. No, I don't.

Q. Is that important to you?

A. Well, let me back up. Obviously he used Mississippi specific information with respect to expenditures.

Q. Do you know whether or not any of the NEMIS population were Mississippi residents?

A. I believe a few were.

Q. We already covered the ground that some of the NEMIS population was public aid?

A. Yes.

Q. How does the Mississippi Medicaid population different from the NEMIS population?

Better yet, let me get straight to the chase.

How does the Mississippi Medicaid population differ from the public aid recipients in NEMIS?

A. I don't know.

Q. Have you looked at that?

A. No, I have not.

Q. Do you think that's important?

A. If Dr. Miller's model were built only on the public aid recipients and the NEMIS data set, then that would be important to look at.

Q. Generally how does the Mississippi Medicaid population differ from the NEMIS population?

A. If we look at the part of NEMIS that was directly used by Dr. Miller which is persons 18 or older with medical expenditures not institutionalized and look at that same cohort from Mississippi Medicaid.

Q. You have done that, right?

A. Yes.

Q. These reports are produced to us?

A. They are.

For example, if we were looking at gender, the Mississippi Medicaid population is 60 percent less white, 485 percent more African

American. If we were looking at gender, it's 50 percent less male and 39 percent more female.

If we were looking at age distribution, 18 to 35, there's 26 percent higher representation of that age group in the Medicaid population. 35 to 65, 40 percent lower. Over 65, 49 percent higher. That's exactly what you would expect given the definition of Medicaid eligibility.

If we were to look just at the people over the age of 65 noninstitutionalized, if we look at racial characteristics, 62 percent less white, 538 percent more black. Gender, 38 percent less male, 26 percent more female.

The young/old, 65 to 75, 29 percent less in the Medicaid population. Old/old, 85 or older -- I mean 85 or older, 164 percent more in the Medicaid population.

Those kinds of differences show up in all the cross tabs and subcategories, and we see the same order of magnitude differences, only more dramatic when you start talking about the institutionalized Medicaid population versus noninstitutionalized NEMIS.

Q. That's all in the report?

A. Yes.

Q. Let me ask you this. Why does that matter?

A. It matters for several kinds of reasons. First of all, the smoking prevalence in these different categories which the epidemiologists have testified to is dramatically different. So that if we say, okay, here's a smoking attributable fraction based on a NEMIS data set which is mostly white and fairly well balanced, and with a normal population age distribution, and then we go to the Mississippi Medicaid which is mostly black and mostly not in the age groups with highest smoking prevalence, and much more female, and apply smoking attributable fraction that we developed from the NEMIS data set, we are putting in a population that will have a very, very different smoking prevalence, very, very different mix of medical conditions, very, very different set of co-morbidities or parallel risk factors.

We know the population is poorer. We know it's less well educated, and we know it's more minority. All of those things have independently been shown to be associated with higher medical expenditures. We have higher medical expenditures on the one hand and lower prevalence of smoking on

the other, yet we are supplying smoking attributable fractions developed from a population where that is not true.

Q. You know it's not true?

A. Through demographic characteristics.

Q. Where are you getting your smoking prevalence for the smoking Medicaid population in Mississippi?

A. The testimony from Dr. Courier. The exhibits attached to that deposition.

Q. It actually had smoking prevalence on the Mississippi Medicaid population?

A. No. For these demographic groups.

Q. Within the State of Mississippi?

A. Within the State of Mississippi which are substantially overrepresented in the Medicaid population.

Q. Did you look at any other surveys in Mississippi about the poor, the black, or the indigents regarding their smoking prevalence?

A. Other than the ones that have been produced, no.

Q. Did you make inquiries if there was any other information?

A. No, sir.

Q. You think that might be important?

A. Additional information is always valuable. I have no reason to think the information produced is not -- cannot be relied upon.

Q. Did you make these same kinds of distinguishing factors between the population of state employees on the insurance program and the NEMIS?

A. No, I did not.

Q. Do you plan to do that?

A. I haven't been asked to do that.

Q. What about for the people receiving indigent care at Charity Hospitals?

A. I haven't been asked to do that, and I have not done it.

Q. You're really focused in on Medicaid, aren't you?

A. Yes, sir.

Q. That's what you plan to testify about, don't you?

A. That's my expectation at this time.

Q. All these comparisons of the NEMIS to Mississippi Medicaid population, where did you get the demographics on the Mississippi Medicaid

population?

A. In the data sets.

Q. In the MMIS?

A. MMIS and MDS+.

Q. Did you look at the 2082 forms at all?

A. Not for this purpose.

Q. These were things you produced today. I will go ahead and get you to mark those as the next three exhibits to get you to identify those for me generally.

Could you tell me what those are? I guess she has them in order. Exhibit #10, Exhibit #11, Exhibit #12. Generally tell me what they are.

A. Exhibit #12 is further run-off of the MMIS database for 1965. This is --

Q. For 1965.

A. I'm sorry.

Q. I know. We're getting close.

A. 1995.

Which in addition to the race and gender and age distributions which I think are also contained in the documents you already have add to that a cross tabulation of between race and gender for this subset of the Medicaid population which is

age 65 or older, and there are two subgroups there. Those who do have long-term care claims and those who do not.

Q. Okay.

A. Exhibit #11 -- I'm working backwards.

Exhibit #11 is a more detailed cut at the MMIS data set showing the age distribution rather than by the broad categories that we previously have done, vital statistics age groupings with cross tabs, then by race and gender and sex, and then some cross tabs between gender and race attached to that.

Q. All right.

A. Exhibit #10, counting down, is just a run that I did off of the recently released 1995 national medical expenditures that showed the distribution of expenditures in the population as a whole compared to the Medicaid population as a whole nationally for type of medical care service used. The difference in that percentage distribution.

Q. All right. You produced several analyses. I assume these are all cross-sectionals of the NEMIS data or MMIS data?

A. For the MDS+ data, yes.

Q. They are for your purposes to do comparisons between the population on NEMIS and the population on Medicaid?

A. That's correct.

Q. Could you identify that for me, please?

A. This is a spread sheet that we produced in June of 1996.

Q. For the record, that's Exhibit #13.

A. I'm sorry.

That tried to do some rough estimates for a particular fiscal year, namely 1993. Information that came from both the Mississippi annual report and the Kaiser commissions report of individual state data as to which kinds of Mississippi Medicaid expenditures might be unrelated to smoking.

Q. What do you mean unrelated to smoking?

A. Of the -- of all of the cross tabs on the data -- in other words, how much money did we spend on pregnant women, or how much money did we spend on nurse mid wife services or whatever. As you went through the categories of eligibles and the categories of services, were there ones which were the high degree of probability were for people

or for services where those costs are likely to be unrelated to smoking.

Q. How did you make that determination?

A. It was judgment call that a significant part of these payments were, for example, the easy one is Medicare Part A and B buy-in. That's what it is. Eyeglasses.

Q. Is that for a year?

A. Yes. One year.

Q. What year?

A. 1993. Eyeglasses, not a smoking related condition. Mental retardation, not a smoking related condition.

Q. How do you know it's not a smoking related condition?

A. It's not on the attorney general -- the surgeon general's list as a smoking related condition.

Q. You accept the surgeon general's list?

A. For the purposes of preparing this little exercise. This is not something that we have done anything further with. Just a sort of ballpark what kinds of things might be excludable on their face.

Q. All right. What percentage of the

total medical expenditures for 1993 do the unrelated smoking expenditures comprise?

A. What percentage do these things on this list comprise of the grand total?

Q. Yes. Of total Medicaid expenditures, not administrative costs.

A. Somewhere between 33 and 49 percent.

Q. Is it your understanding that 50 percent of the costs that are not represented by those are debateable as to whether or not they are attributable to smoking?

A. One could presumably argue that some portion of the remainder could be attributable to smoke.

Q. Some portion in 1993 anyway of anywhere from 62 percent to -- you tell me the numbers.

A. Roughly 50 to 65 percent could have been smoking related.

Q. A portion of those costs could be smoking?

A. Could have smoking related things in them.

Q. Do you have an idea of what the smoking attributable expenses would be in the Mississippi Medicaid program?

A. No.

Q. Are you going to comment on Dr. Oster's report?

A. I would expect that if that report is used that I might very well be asked to comment on the applicability, again, of where the model came from to Mississippi Medicaid.

Q. Do you know what assumptions went into his underlying methodology?

A. I don't know all of those underlying assumptions. I know that we are using -- he is using data from California and applying that to Mississippi.

Q. Do you have any reason to question whether or not smoking causes low birth weight babies?

A. I have no reason to question that one way or the other. It may be a contributing factor. It probably is almost certainly not the only contributing factor.

Q. Would you turn to Paragraph 8? Have you read that?

A. Yes.

Q. Tell me what you mean by it. What changes do you envision of the Medicaid program?

A. If I had a crystal ball, I could tell you what would happen, but I can't tell you the kind of things that are under consideration, and all of this has to do with the political environment in which the Medicaid program operates.

Q. Are you speculating on what changes may or may not come?

A. I am saying there will almost certainly be significant changes made to the Medicaid program in conjunction with the overall stated goal of both political parties to reach a balanced budget by the year 2002, and given that everybody on both sides of the aisle, the National Governors Association, the White House are all proposing changes to the Medicaid program, that it is highly likely there will be changes to the Medicaid program which may be more Draconian or less Draconian and will be more significant as we move toward trying to reduce the deficit. There have been Draconian proposals.

Q. Such as eligibility?

A. Such as repealing Title 19 and replacing it with block grants. Proposals which would completely turn the system around and do different things. Repeal of DISH, repeal of Borne Amendment, let the states individually define

disability instead of having the Secretary of Health and Human Services define it. The governors want to take treatment of EPDST. I said that wrong. EPSDT. We have voucher proposals. We have the White House wanting to put a per capita cap.

Q. Have any of those -- Are you finished?

A. There are more. Terminate the existing law expansion to eligibility for children, give the states individual authority over qualifications, and standards and rates paid for providers without limit. That's just a sampling of the kinds of things that are being considered, some of which have been introduced. The voucher stuff, the Kennedy/Hatch legislation that's been dropped in the hopper.

There's tremendous number of things out there, some subset or amalgamation of which are likely to be adopted. I can't tell you which ones. That would be speculative. What we are saying is that there is a high likelihood of sufficiently significant changes to this program over the next few years to make it exceptionally difficult to extrapolate from historical expenditures the future.

Q. Do you think the states will in some

capacity be caring for their indigent population in terms of health care regardless of the changes in Medicare?

A. Someone will be caring for the indigent. I would expect the states would continue to have a significant role in that. The federal government might find some other mechanism for doing it in the Spirit of Philadelphia this week. We might see pressures on the private sector to do it. A whole variety of things which could happen.

Q. Have any of the issues or ideas you just espoused been passed into law?

A. No. Some of these ideas shut down the government last year.

Q. Have any of them been passed?

A. No.

Q. Are currently any of them set to be made into law or passed into law or take effect next year?

A. As of this time, no legislation has occurred.

Q. So none of those have got any time set at least to the year 2000 that these have been -- the federal government has required that any of these be implemented as we sit here today?

A. As we sit here today, none of these are the law.

Q. I didn't see in the documents you produced to me the report by Jerry Oster. Did I just overlook that?

A. It's a deposition.

Q. You haven't looked at his actual report?

A. I have not seen his actual report.

Q. You have not gone through his methodology?

A. No.

Q. You're not prepared to give opinions critiquing Oster or the assumptions?

A. Other than what I have seen in the deposition at this point in time, I haven't analyzed that.

Q. Give us two minutes.

(A break was taken.)

BY MR. YOUNG:

Q. You sat here, and apparently you and Cynthia, Ms. Howlett-Willis, y'all sliced and diced the NEMIS and MSIS data, and you have drawn comparisons, whatever, you looked at the differences between the two populations.

Did you find any that were alike in any respects? Did you look at that? That's two questions.

Did you look to see if there were any situations in which they were alike?

A. Let me just double-check. A couple of places where the differences were small.

Q. When you're looking at that, you look like you have a condensed version of something.

A. These are the same documents that you received. I added some Post-its to be able to find different documents.

Q. These are all in --

A. 100 percent of these were produced.

In some of the small categories --

Q. Tell me which one you're referring to.

A. We had marital information in NEMIS and we had marital information in MDS+, and in some of the small categories like separated and divorced. The differences are small.

Q. Can you name those categories?

A. The separated and divorced categories and marital status between the MDS+ which is nursing home residents over the age of 65 and the NEMIS data set for 65 and older with medical

expenses which excludes nursing homes. There was very little difference in the small marital categories.

As a general proposition, we are looking at differences that range from the 30 to 40 percent range up to the hundreds of percentage point differences. Most of the differences -- to respond to your question, most of the differences are large, and certainly for any of the broad categories I can say with a high level of certainty that these are not the same populations.

Q. Did you do the same comparisons between the Medicaid individuals and the publicly aided people on NEMIS?

A. On NEMIS, no.

Q. Could you have?

A. I did not have that cut on the NEMIS data.

Q. Who is it? Who did you get your cuts from?

A. I do not know at this moment whether we have that in our data set, but if it's there we did not do that cut.

Q. Can you confer with Cynthia and find out whether you have that?

A. I can.

MS. HOWLETT-WILLIS:

It's in the data set. We didn't do the cut because we did it on all over 18s with medical expenditures, rather than limiting it to those with public aid because our understanding was that the model had been built on the larger population. I also had some concerns on my initial look at the NEMIS data at the size of the public aid to population to make any projections at that point in time. I have never gone back to it.

BY MR. YOUNG:

Q. Do you know what the size, Dr. Long, the size of the public aid portion of the NEMIS population was?

A. No, I don't.

Q. Can you identify that for me, please?

A. This is the index for a whole series of bar charts that were also provided that gives more complete descriptions of what's being measured on each of the bar charts.

Q. The key to the kingdom?

A. Yes. This is Exhibit #14.

Q. That represents the comparisons you have done?

A. Yes. This a full description of what's on each of the charts in that packet.

Q. I'm glad I found that then. That will make everything a lot easier.

A. Each chart has one of these letters and subsets. The numbers so you can look at the letter and the number at the top of the chart and find it in here.

Q. I think John played 52 card shuffle with my documents.

MR. HELMS:

Which John? Don't accuse me. I don't play cards.

MR. YOUNG:

The Arnold & Porter John?

MR. STREETER:

That was produced right next.

BY MR. YOUNG:

Q. This for all intents and purposes is sort of an index to the reports you have generated as far as the cross-sectional comparisons of NEMIS?

A. No. No. Not to -- this is not the NEMIS set. There's a set in the documents of bar charts.

Q. I have seen those.

A. That's the index to those.

Q. Let me ask you this. How come when you broke down the MMIS data into demographics, for instance, you couldn't simply use the 2082 reports? Why did you have to use it from the claims data itself?

A. If the MMIS data set is an incidence data set. Data entry there was a person with a long-term care claim or not in contrast to the numbers on the 2082 which are cumulative for the year. It would be basically a prevalence data set. It would include all of the -- it would be weighted by the dollar amounts of the claims.

Q. How many claims an individual made?

A. Right.

Q. I see what you're saying.

Can you identify that for me, please?

A. This is a memorandum from Lewin Associates or Lewin-VHI, to be specific, to a whole collection of attorneys.

Q. You obviously received a copy of that, didn't you?

A. If it's in the documents that were produced to you, I received a copy of it.

Q. Are you relying on that document in any

way?

A. No.

Q. Who is Lewin?

A. Larry Lewin is a well-known health care consultant, Washington based, who has had major engagements in the health care industry for probably 20 years. Has been a major consultant to the State of Florida historically.

Q. Can I see that real quick, please?

A. Sure.

Q. It appears, and if you need to read this, please do. That they have run or calculated the SAMMEC formula for Mississippi and for Minnesota. You read it. Take a few minutes and look at it if you would like.

A. I have read it. Not in great depth.

Q. What does it appear to you?

A. It appears that they --

Q. Lewin?

A. Right. They did not, in fact, run the SAMMEC model. They looked at the ICD-9 codes for the diagnoses that trigger calculations in the SAMMEC model and asked how many people in each of Mississippi and Minnesota had -- how many Medicaid people in Mississippi and Minnesota had hospital

discharges that included ICD-9 codes that fell in that list.

Q. Smoking related ICD-9 codes?

A. The ICD-9 codes in the SAMMEC list.

Q. Do you know what ICD-9 codes are in the SAMMEC list?

A. I don't know that list. I am assuming they are smoking related.

Q. Are the results on there?

A. Yes. That they found -- do you want to hear about Minnesota or just Mississippi?

Q. Mississippi. Minnesota can fend for itself.

A. 1987, 7,500 persons had a diagnosis included on the SAMMEC list. This being the lower than the 16,300 persons that had been estimated using the National Hospital Discharge Survey, and the reason they give for the difference in the result is the different age distribution reflected in the original National Hospital Discharge Survey compared to the actual age distribution in the Medicaid.

Q. Did you ask to see any of the reports or runs by Lewin in preparation as an expert in this case?

A. No, I did not.

Q. Let me see that real quick. We may be done.

This is what struck me as sort of strange. Maybe you can explain this. Do you see that first paragraph?

A. Yes.

Q. It says that 7,000 plus had a diagnosis associated with smoking in Mississippi. 4,000 in Minnesota.

A. 4,300, yes.

Q. What would explain the difference? You have looked at a comparison at Medicaid programs. Is Minnesota's program lower than Mississippi's or smaller?

A. I have not looked explicitly at the Minnesota program to know how many people are eligible for Medicaid in Minnesota. It could be a smaller number even though it's a higher population state given the higher per capita nicotine.

Q. I figured there may be an explanation?

A. I don't know.

Q. Are you working with Verhalen? Have you heard of Robert Verhalen?

A. No.

Q. Wecker?
A. No.
Q. Are you providing any services to Mr. Wecker?
A. No.
Q. How about George Worm?
A. No.
Q. Do you know him in Baton Rouge?
A. No, I don't.
Q. Dr. Long, is your opinion in this case going to be that the -- you can not quantify health care costs related to smoking for the Mississippi Medicaid program?
A. It will not be my opinion that cannot be done.
Q. It's your opinion that it can be done?
A. It may very well be possible to do it.
Q. Okay.
A. I don't know that it has been done or will be done.
MR. YOUNG:
That's it.
(Conclusion.)

REPORTER'S CERTIFICATE

I, LINDY ROOT, Certified Court Reporter, do hereby certify that the above-named witness, after having been first duly sworn by me to testify to the truth, did testify as hereinabove set forth;

That the testimony was reported by me in shorthand and transcribed under my personal direction and supervision, and is a true and correct transcript, to the best of my ability and understanding;

That I am not of counsel, not related to counsel or the parties hereto, and not in any way interested in the outcome of this matter.

Lindy Root

LINDY ROOT
CERTIFIED COURT REPORTER
REGISTERED PROFESSIONAL REPORTER